Army Public Health Center (Provisional)

Public Health Report

Surveillance of Suicidal Behavior
January through December 2014

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1 Summary

1.1 Purpose

This publication presents characteristics of Soldiers with suicidal behavior during 2014. This includes suicides identified by the Armed Forces Medical Examiner System, as well as suicide attempts and suicidal ideations reported in Department of Defense Suicide Event Reports among active-duty Regular Army, activated National Guard, and activated US Army Reserve Soldiers.

1.2 Findings

- The number of suicides in 2014 decreased to 134, a decrease from 149 in 2013, and the potential peak of 185 in 2012. This is the smallest number of annual suicides since 2007. The suicide rate also decreased to 20.5 per 100,000 persons, the same rate as in 2008.

- The number of suicide attempt cases reported for 2014 was 504. The suicide attempt rate was 77.2 per 100,000 persons. Both counts and rates were higher than in the previous 5 years, but lower than 2005 to 2008. The number of suicidal ideation cases was 1040, more than in any year since suicidal ideation data became available in 2007. The suicidal ideation rate was 159.3 per 100,000 persons, also the highest rate since suicidal ideation cases became available. The increase in 2014 may in part be a result of better reporting, with greater emphasis being placed on completion of DoDSERs for nonfatal suicidal events.

- The largest number of suicide cases during 2014 occurred at Fort Hood (n=17), Fort Bragg (n=13), and Fort Campbell (n=13), which have some of the largest populations of Soldiers.

- There was a statistically significant increase in suicide attempts and suicidal ideations outside of the United States (primarily Korea and Germany) in 2014 compared to 2012 and 2013.

- The demographic and military characteristics of Soldiers who engaged in suicidal behavior in 2014 reflect the distribution of the force: most suicide cases were male (94%), 25-34 (46%), non-Hispanic white (57%), and among the E5-E9 ranks (48%); most suicide attempt and suicidal ideation cases were male (77%), 17-24 (51%), non-Hispanic white (57%), and among the E1-E4 ranks (65%).

- The rates of suicide attempt and suicidal ideation by women and by Hispanic and non-Hispanic black Soldiers increased in 2014 compared to previous years. The rates of suicidal ideation by Noncommissioned Officers and Junior Officers also increased in 2014.

- More than half of suicidal behavior cases had been diagnosed with a behavioral health disorder before the suicidal event: 60% of suicide cases, 76% of suicide attempt cases,

and 77% of suicidal ideation cases. Suicide cases were primarily diagnosed with adjustment (40%), mood (38%), and substance use disorders (25%). Suicide attempt and suicidal ideation cases were primarily diagnosed with adjustment (60%), mood (50%), and other anxiety disorders (36%).

- The principal stressors reported for 2014 suicide cases included relationship problems (53%), legal problems (30%), work stress (25%), and physical health problems (21%). The principal stressors reported for suicide attempt and suicidal ideation cases included a history of abuse (57%), work stress (43%), relationship problems (41%), and legal problems (28%).

- In the year before the event, 24% of suicide cases and 28% of both suicide attempt and suicidal ideation cases were diagnosed with a sleep disorder.

- In the year before the event, 37%, 46%, and 54% of suicide, suicide attempt, and suicidal ideation cases, respectively, received a pain diagnosis.

2 References

See Appendix A for a listing of references used in this report.

3 Authority

Army Regulation (AR) 40-5 (Preventive Medicine, 25 May 2007), Section 2-19.

4 Introduction

The Army Public Health Center (Provisional), Behavioral and Social Health Outcomes Program (BSHOP) collects, analyzes, and disseminates surveillance data on suicidal behavior cases (suicide, suicide attempt, and suicidal ideation) among active-duty Regular Army, activated National Guard, and activated Army Reserve Soldiers in the United States (U.S.) Army. Data related to suicidal behavior are stored in BSHOP's Army Behavioral Health Integrated Data Environment (ABHIDE, Appendix B), the most comprehensive data warehouse for information pertaining to suicidal behavior in the Army. *Surveillance of Suicidal Behavior*, published annually by BSHOP, describes the characteristics of Soldiers who engaged in suicidal behavior and presents observed trends and changes in risk factors over time. Suicide surveillance data are used by key military leaders, public health practitioners, and behavioral health (BH) providers (e.g., psychologists, social workers, and psychiatrists) in the U.S. Army to focus prevention efforts, plan programs, allocate resources, develop policy, monitor trends, and suggest mitigating strategies, including actionable recommendations.

4.1 Definitions, Data and Caveats

This publication includes estimated counts and proportions of suicidal behaviors. The Department of Defense defines suicide as "death caused by self-inflicted injurious behavior with any intent to die as a result of the behavior."[1] A suicide attempt is defined as "a nonfatal self-inflicted potentially

injurious behavior with any intent to die as a result of the behavior."[1] Suicidal ideation is defined as "thoughts of engaging in suicide-related behavior."

Suicide cases are identified by the Armed Forces Medical Examiner System (AFMES) and may differ from counts by G-1, which are identified primarily from the Casualty and Mortuary Affairs Operation Center. Counts of suicide cases include pending as well as confirmed cases. Although most suicide cases presented in this report are confirmed, formal confirmation by AFMES can take up to one year. Suicide attempt and suicidal ideation cases are identified by Department of Defense Suicide Event Reports (DoDSERs), which are completed only for cases serious enough to warrant hospitalization or evacuation. Therefore, the numbers presented in this publication underestimate the full scope of suicidal behavior within the U.S. Army.

Data on suicide cases became available in 2001. Data on suicide attempt cases became available in 2004. Data on suicidal ideation cases became available in 2007.

Crude and stratified rates per 100,000 persons for each year were calculated using counts of suicidal events (suicides or suicide attempts or suicidal ideations) and of total Soldiers in the active-duty U.S. Army, thereby reflecting yearly changes in both the number of suicidal events and the number of Soldiers. To make appropriate comparisons between suicide rates in the U.S. Army and U.S. general population, rates should control for the higher prevalence of young and male Soldiers in the U.S. Army compared to the U.S. general population. Suicide rates per 100,000 persons adjusted for age and sex using the direct adjustment method were calculated for the U.S. Army and the U.S. general population, 2001 – 2013. The 2004 U.S. Army distribution was used as the standard population. Adjusted suicide rates for the U.S. general population are based on available suicide data from the Centers for Disease Control and Prevention (CDC)[16] and data from the US Census Bureau.[15] Adjusted rates were not calculated for 2014 because the CDC had not released the number of suicides in the U.S. population during 2014 at the time this report was prepared.

Self-reported depression symptoms from the Post-Deployment Health Assessment and Reassessment (PDHA and PDHRA) refer to responding "More than half the days" or "Nearly every day" for at least one question on the Patient Health Questionnaire-2 (PHQ-2)[17].

Self-reported posttraumatic stress disorder symptoms from the PDHA and PDHRA refer to a "Yes" response to at least two of the four questions on the Primary Care Posttraumatic Stress Screen (PC-PTSD) [17].

Several caveats must be considered when reviewing this report. BSHOP is notified of a suicide attempt or suicidal ideation case when a DoDSER is completed. Missing (unreported) DoDSERs are not distributed evenly or randomly and variation in reporting occurs by installation, time, and event type. Thus, an increase in the number of cases may be the result of increased documentation and not a true change in the number of cases for a specified time period.

DoDSERs for suicide cases are completed by behavioral health professionals within 60 days following AFMES confirmation of the suicide. Because this publication includes cases being investigated as probable suicides but that have not yet been confirmed, information on stressors and other variables obtained from the DoDSER are not available for those cases.

DoDSER data for suicide cases are generally more complete because they are typically completed by a provider who is familiar with the case. However, some DoDSER data on suicide attempts and suicidal ideations are more complete because the Soldiers were alive and thus able to provide information about the event.

Additional caveats relate to interpreting surveillance data. Surveillance data typically improves as data collection becomes refined over time. This may result in frequencies and proportions appearing to increase in later years, although these increases may be the result of improved data capture. This publication presents proportions as well as rates. Although proportions are appropriate for public health planning, differences in the underlying U.S. Army population over time are not taken into account. Rates provide better comparisons across years and subpopulations. In addition, the data presented in this publication lack the context of similar data on the Army as a whole. For example, it is unclear to what extent finding 25% of suicide cases diagnosed with a substance use disorder indicates a difference from or mirrors the pattern of substance use disorders in the Army as a whole.

Deployment information in this publication is only for deployments in support of Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND), because deployments in support of earlier conflicts or other operations are not available in the data received. In addition, deployments are lifetime deployments to those operations while in any service; they are not limited to deployments during service in the Army.

BH encounters and diagnoses (defined in Appendix C) are based on medical claims during the Soldier's time in service and only include claims from medical treatment facilities and claims from purchased care submitted for payment by the government.

The Periodic Health Assessment (PHA) is a preventive screening tool designed to improve the reporting and visibility of Individual Medical Readiness (IMR) for all Soldiers. Although all Active Duty Service Members are required to complete a PHA annually, a PHA is considered current if it has been less than 15 months since the last PHA was completed. For this publication, a PHA was considered current if it had been less than 15 months since the last PHA was completed.

DoDSER questions about stressors ask whether the stressor occurred and how recently. Stressors reported within a year of the event are reported. Stressors related to having a family member or friend die by suicide and being the victim of abuse are also reported if they occurred at any time during the Soldier's life. Lifetime histories for these stressors are reported due to their ability to have a lasting negative impact on Soldiers. Information on four stressors—work problems, death of a family member or friend, and being the victim or perpetrator of abuse—combine answers from several DoDSER questions. Any indication of work problems includes workplace hazing, job problems, poor performance, and coworker issues. The death of a family member or friend includes the death of a spouse, other family member, or friend from any cause, including suicide. Being the victim or perpetrator of abuse includes sexual harassment, as well as emotional, physical, or sexual abuse or assault.

Characteristics of cases from 2014 have been compared statistically with characteristics of cases from 2012 and 2013 using Chi-squared or Fisher's exact test analysis, as was appropriate. Significant differences are noted in the discussion of the characteristics. In the tables, p-values in bold indicate a significant difference, $p<0.05$. Where no differences are noted, significant differences were not found.

4.2 Organization of the Report

In addition to the Summary, References, Authority, and this Introduction, this report is organized into three principal sections:

- Suicide Cases (Section 5)
- Suicide Attempt Cases (Section 6)

- Suicidal Ideation Cases (Section 7)

Sections 5 through 7 present counts and proportions of suicidal behaviors among Soldiers in the U.S. Army.

This report presents information for both 2014 and cumulative time periods (2001–2014 for suicide cases, 2004–2014 for suicide attempt cases, and 2007–2014 for suicidal ideation cases). In most subsections (e.g., Demographic Characteristics), the initial paragraph presents the prevalence of key characteristics and behaviors over the cumulative period. Information for 2014 follows in a series of bulleted statements. The information for cumulative time periods is no longer presented in tables; tables include information for 2012, 2013, and 2014. Tables and figures providing analysis details can be found in Appendix D for suicides, Appendix E for suicide attempts, and Appendix F for suicidal ideations.

4.3 Publication Improvements

The following are new to this publication:

- Period comparisons, which examine changes in the characteristics of Soldiers with suicidal behavior across three time periods, are now reported in a separate Public Health Report.

- Rate tables and graphs in the Appendices include rates of characteristics for the past 10 years for suicide and suicide attempt cases (2005-2014) and rates for the past 8 years for suicidal ideation cases (2007-2014).

- The cutpoints for a positive screen, indicating unhealthy drinking, on the Alcohol Use Disorders Identification Test (AUDIT-C) on the PHA has been changed to match new cutpoints used by clinicians. The cutpoints were raised one point to 5 or more for men and 4 or more for women. Therefore, results may differ from previous publications.

- Additional measures of behavioral health:

  - More than 1 incident BH diagnosis in the year before a Soldier's event.

  - First suicide attempt or self-harm (documented by an E-code) in the year before a Soldier's death; first suicidal ideation (documented by a V-code) in the year before a Soldier's event.

- Changes to information reported from the DoDSER:

  - All stressors reported occurred within a year of the Soldier's event, unless otherwise noted.

  - Lifetime histories of victim abuse (emotional, physical, and sexual) are reported separately as well as combined.

  - Chi-squared analyses for event characteristics and stressors reported for suicide attempts and suicidal ideations (2014 vs. 2013). Statistical comparisons were only made for event characteristics and stressors with <10% unknown or missing data. Comparisons were not made with 2012 due to the large proportion of missing and unknown data.

5 Suicide Cases

During 2014, 134 Soldiers died by suicide. This is 15 fewer cases than in 2013 and 51 fewer cases than in 2012. The crude suicide rate for 2014 was 20.5 per 100,000 persons (95% CI: 17.0 – 24.0), the same rate as in 2008 (Figure 1).

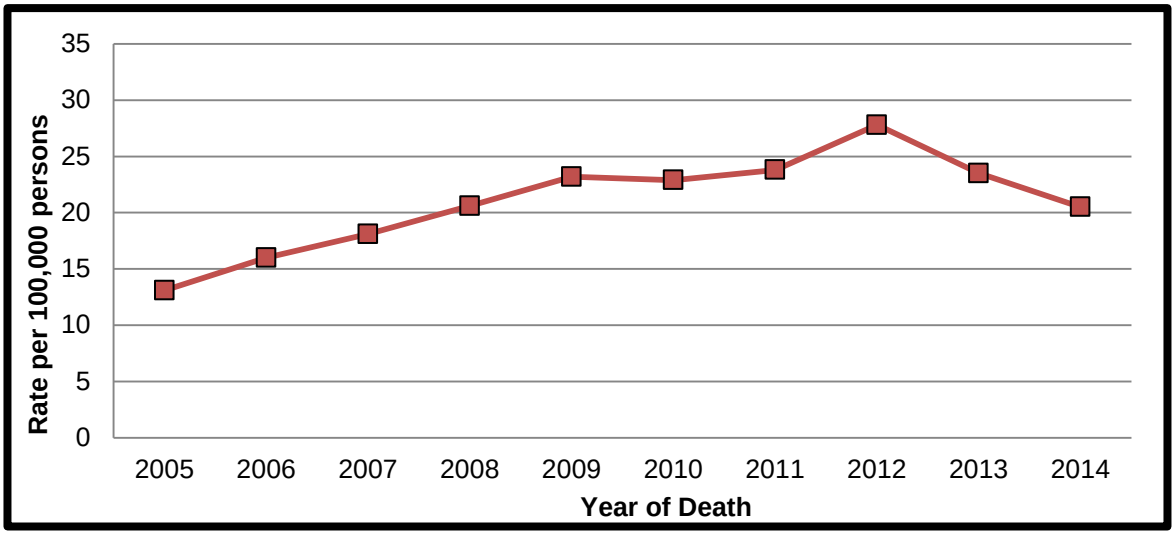

Figure 1. Crude Suicide Rate, per 100,000, U.S. Army, 2005–2014

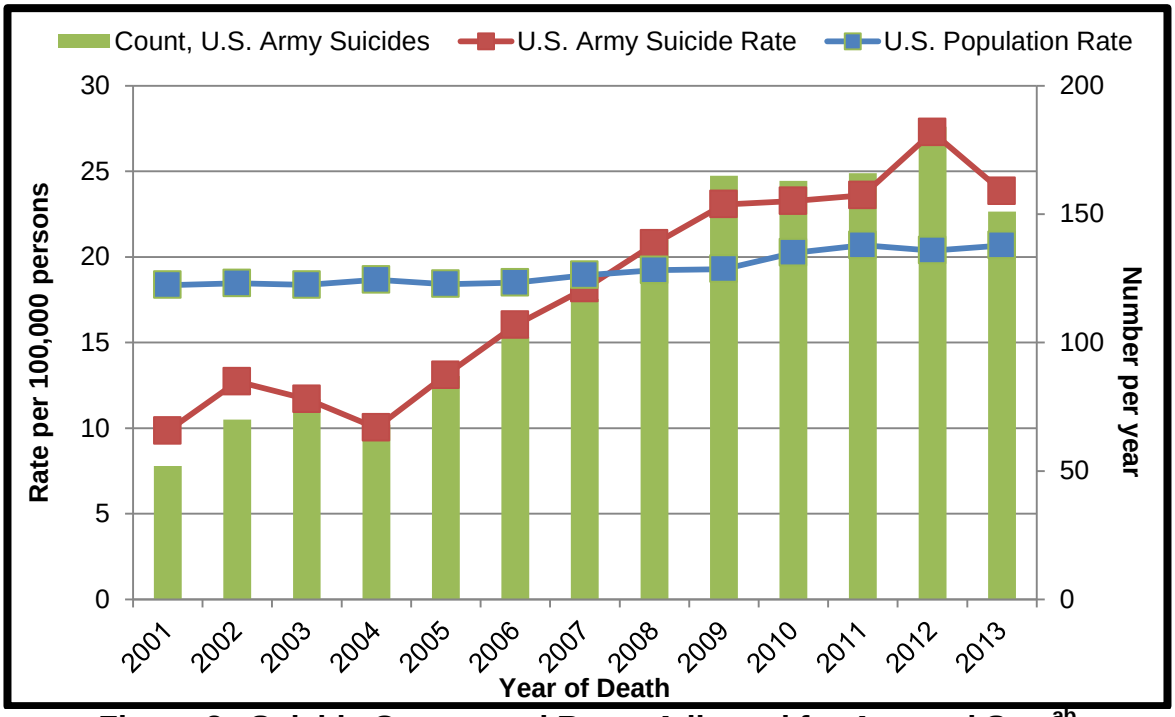

Figure 2. Suicide Counts and Rates Adjusted for Age and Sex,[ab] 2001–2013[c]

Notes: [a]Rates have been direct adjusted by age and sex, using the 2004 U.S. Army distribution as a standard population. [b]U.S. Army suicide rates and counts include active-duty (Regular Army) and activated National Guard and Army Reserve Soldiers. [c]Adjusted rates were not calculated for 2014 because the Centers for Disease Control and Prevention had not released the number of suicides in the US population during 2014 at the time this report was prepared.

From 2001 to 2007, the direct age- and sex-adjusted suicide rate among U.S. Army Soldiers on active duty was lower than the U.S. Civilian rate (Figure 2, previous page). In 2008 through 2013, the U.S. Army rate surpassed the civilian rate. The U.S. Army crude suicide rate in 2005 was significantly lower than the U.S. Army rates in 2007 through 2014, and with the exception of the 2012 rate, rates for the years 2008 through 2014 did not differ significantly.

5.1 Demographic Characteristics

Most suicide cases from 2001 through 2014 were male (95%), non-Hispanic white (70%), and 17 to 34 years of age (78%).

Demographic characteristics of suicide cases and stratified suicide rates during 2014 are described below and in Tables D-1 through D-4 and Figures D-1 through D-3.

- **Sex:** The greatest proportion of suicides was among male Soldiers (94%). The U.S. Army suicide rate for males was 22.6 per 100,000. The small number of suicides among female Soldiers resulted in rates too unstable to report.

During 2014, 134 Soldiers died by suicide. Of these:

- 94% were male
- 46% were 25–34 years of age
- 57% were non-Hispanic white
- 91% were Regular Army
- 48% were in the E5–E9 ranks

- **Age Group:** The greatest proportion of suicides was among Soldiers 25 to 34 years of age (46%), followed by Soldiers 17 to 24 years of age (29%). The U.S. Army rates stratified by age group were: 17–24 years, 20.6 per 100,000; 25–34 years, 24.4 per 100,000; 35–64 years, 15.9 per 100,000.

- **Race-Ethnicity:** A little more than half (57%) of suicides were among non-Hispanic white Soldiers. This was a significant decrease compared to 2013 (71%), with an increase in the proportion of Soldiers in the non-Hispanic black category (11% to 23%, X^2=9.9, p=0.042; Figure 3). The suicide rate for non-Hispanic white Soldiers was 19.5 per 100,000; non-Hispanic black, 23.1 per 100,000. The small number of suicides in other race-ethnicity groups resulted in rates too unstable to report.

- **Marital Status:** Over half (60%) of suicide cases were married.

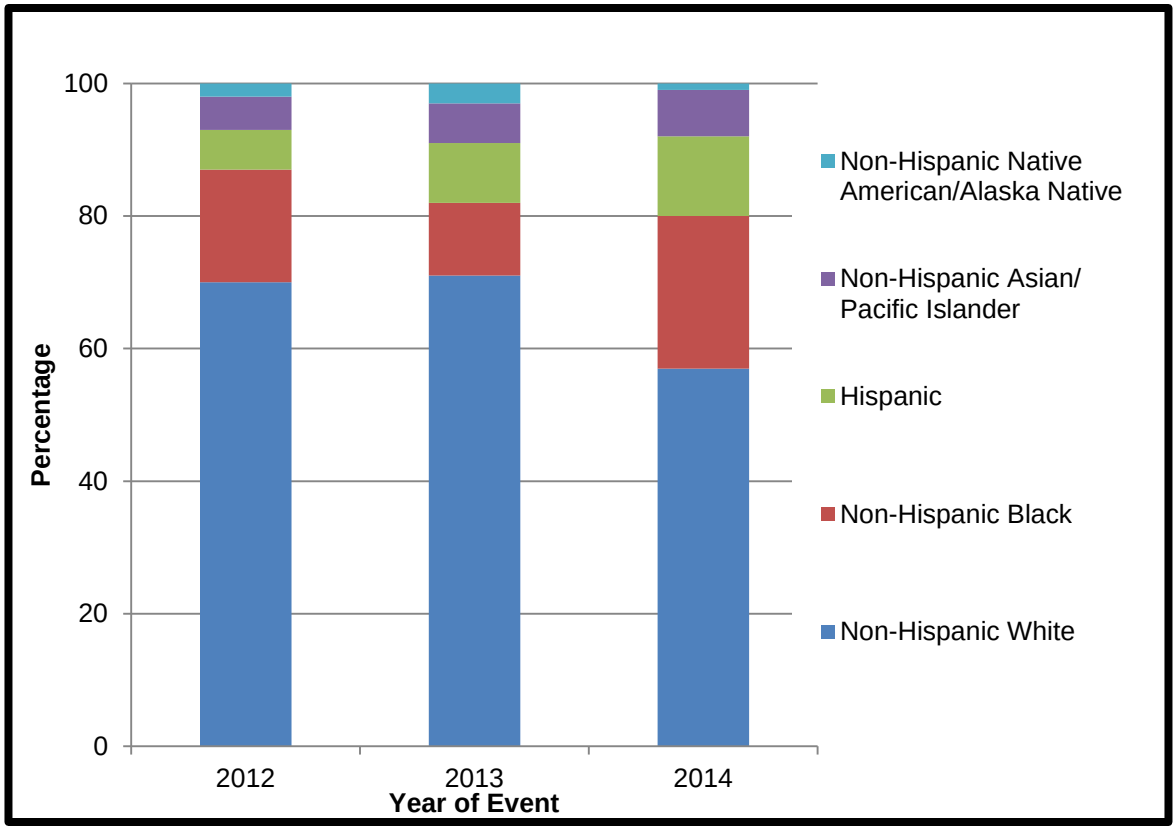

Figure 3. Race Distribution, Suicide Cases, U.S. Army, 2012–2014

5.2 Military Characteristics

From 2001 through 2014, the majority of suicides were among active-duty Soldiers in the E1–E4 (53%) and E5–E9 ranks (37%). Most had a history of an OEF, OIF, or OND deployment (64%), with 37% having deployed once.

Military characteristics of suicide cases from 2014 are described below and in Tables D-5 through D-7 and Figures D-4 and D-5.

- **Component:** The greatest proportion of suicides occurred among Regular Army Soldiers (91%). The suicide rate for the Regular Army was 24.0 per 100,000. The small number of suicides among activated National Guard and Army Reserve Soldiers resulted in a rate too unstable to report.

- **Rank:** Most suicides occurred among Soldiers in the E5–E9 ranks (48%), followed by the E1–E4 ranks (40%). Suicide rates for the enlisted ranks were: E1–E4, 22.7 per 100,000 and E5–E9, 22.9 per 100,000. Both the proportion and rate of suicides among the E5-E9 ranks surpassed the E1-E4 ranks for the first time since suicide data became available in 2001. The small number of suicides among Officers and Warrant Officers resulted in rates too unstable to report.

- **Lifetime History of OEF/OIF/OND Deployment:** Most (69%) of the suicide cases had a history of an OEF, OIF, or OND deployment. Among suicide cases, 22% had one deployment and 25% had two deployments.

5.3 Event Characteristics

From 2001 through 2014, the location of death for 78% of suicides was in the United States. The primary method of suicide was gunshot wound (67%), followed by hanging/asphyxiation (21%). From 2004, when DoDSERs were implemented, through 2014, 20% of the events involved alcohol and 27% of the cases communicated their intention in advance of the event.

Event characteristics of suicide cases from 2014 are described below and in Tables D-8 through D-10. These characteristics apply only to the 130 (97%) cases for whom DoDSERs have been completed. (DoDSERs are completed within 60 days following AFMES confirmation of the suicide, which can take a year or more. Deaths that appear to be suicides but are pending confirmation are included in this publication, but do not yet have completed DoDSERs.) Differences relative to 2012 and 2013 are noted only when significant.

- **Location:** Most (92%) suicides occurred in the United States.

- **Communication:** One-quarter (25%) communicated suicidal intentions in advance.

- **Method:** The most common method of suicide was gunshot wound (75%), followed by hanging/asphyxiation (21%). There was a significant increase in the proportion of suicide cases that died from a gunshot wound in 2014 (75%) compared to 2012 (62%, X^2=8.9, p=0.030), with decreases in hanging/asphyxiation, overdose, and other methods.

- **Alcohol or Drug Involvement:** The prevalence of alcohol and drug involvement during the suicide event was 29% and 5%, respectively.

- **Installation:** The greatest proportions of suicides were at Fort Hood (14%), Fort Bragg (11%), and Fort Campbell (11%).

5.4 Stressors

Stressor data are extracted from information reported in DoDSERs, which were first implemented in 2004. From 2004 through 2014, stressors were reported among 66% of suicide cases. Stressors occurred within a year of the Soldier's death unless otherwise noted. Individual stressors with the highest prevalence included relationship problems (48%), legal problems (28%), work stress (27%), physical health problems (19%), and ever being the victim of abuse (15%).

Stressors of suicide cases from 2014 are described below and in Table D-11 and Figure 4.

- **Any Stressor:** Stressors were reported among 73% of suicide cases.

- **Relationship Stressors:** Relationship problems were reported among 53% of suicide cases.

- **Legal Stressors:** Some type of legal stressor was reported for 30% of suicide cases, the most common being civil legal problems (15%) and Article 15 actions (13%).

- **Health-Related Stressors:** Physical health problems were reported among 21% of suicide cases and 7% had been the subject of a medical evaluation board. Family health problems affected 5% of suicide cases. Moreover, 6% experienced the death of a family member or friend, and 2% experienced the suicide of a family member or friend.

- **Work and Financial Stressors:** Work-related stress was reported for 25% of suicide cases, and 8% of suicide cases had stress related to a financial problem.

- **Victims and Perpetrators of Abuse:** Few (2%) suicide cases were victims of abuse within a year before their death; 11% were perpetrators of abuse during this same time period. Fifteen percent of suicide cases were ever victims of abuse.

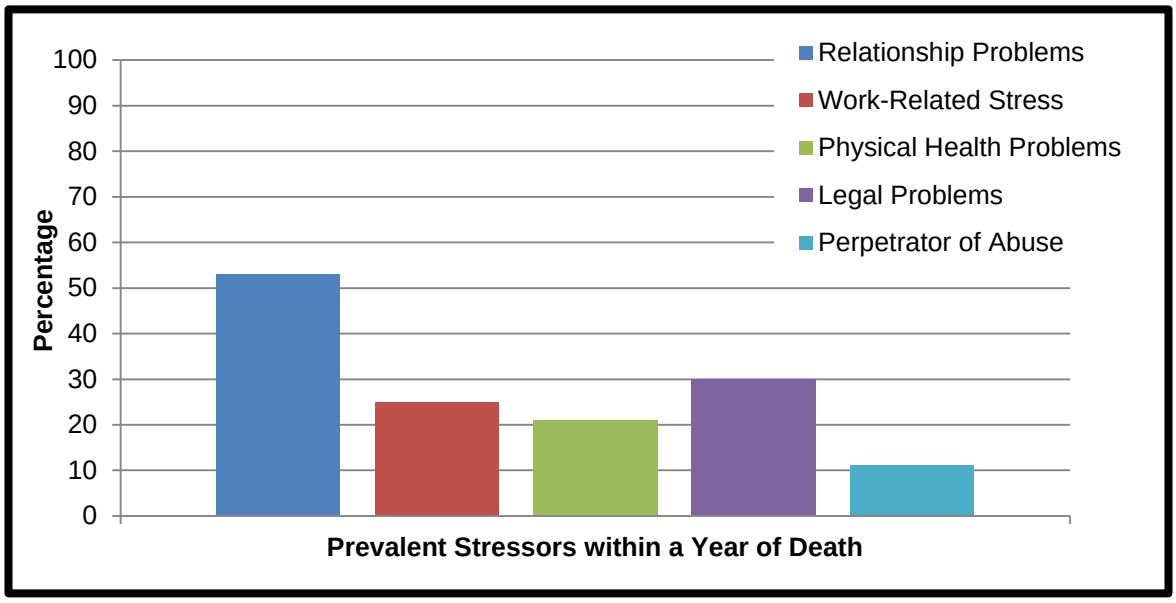

Figure 4. Prevalent Stressors, Suicide Cases, U.S. Army, 2014

- **Suicide Prevention Training and Use of Army Counseling Services:** Almost half (49%) of suicide cases had ever received suicide prevention training, while almost three-fourths (70%) of suicide attempt cases had ever received suicide prevention training. Nine percent of cases utilized the Army Substance Abuse Program (ASAP) and 10% used the Family Advocacy Program, within a year before their death.

5.5 Behavioral Health Indicators

BH indicators from the Post-Deployment Health Assessment (PDHA), first implemented in 2004, the Post-Deployment Health Reassessment (PDHRA), implemented in 2005, and the latest version of the PHA, implemented in 2009, are described here and in Tables D-12 and D-13. The prevalence of BH encounters and specific diagnoses are also described below and in Table D-14. Previous suicidal events are also described.

5.5.1 Post-Deployment Health Assessment

Of the suicide cases from 2004 (the year the PDHA was implemented) through 2014 who had deployed and completed a PDHA in the year before the event (n=277), 40% reported depression

symptoms, 27% reported posttraumatic stress symptoms, and 3% reported suicidal thoughts on the PDHA. Providers referred 17% of cases to BH care. There were, on average, 5 months between completion of the PDHA and the event.

BH indicators for suicide cases from 2014 with a PDHA (n=19) are described below and in Table D-12. On average, 6 months elapsed between the PDHA and the event.

- **Depression Symptoms:** 47% reported depression symptoms.
- **Posttraumatic Stress:** Over one-third (37%) reported symptoms of posttraumatic stress.
- **Suicidal Thoughts:** Five percent reported suicidal thoughts.
- **Referrals:** Providers referred 21% to BH care.

5.5.2 Post-Deployment Health Reassessment

Among the suicide cases from 2006 (the first year the ABHIDE contains PDHRA data) through 2014 with PDHRA information (n=240), 46% reported depression symptoms, 34% reported posttraumatic stress symptoms, and 2% reported suicidal thoughts on the PDHRA. Providers referred 14% of suicide cases to BH care. On average, there were 5 months between the PDHRA and the event.

BH indicators for suicide cases from 2014 with a PDHRA (n=18) are described below and in Table D-12. On average, 5 months elapsed between the PDHRA and the event.

- **Depression Symptoms:** Over a quarter (28%) reported depression symptoms.
- **Posttraumatic Stress:** Over one-third (39%) reported symptoms of posttraumatic stress.
- **Suicidal Thoughts:** None reported suicidal thoughts.
- **Referrals:** Providers referred 11% to BH care.

5.5.3 Periodic Health Assessment

Among suicide cases from 2008 (the first year the ABHIDE contains PHA data) to 2014 with a PHA in the 15 months before death (n=651), 10% screened positive for unhealthy drinking, while 1% screened positive for a probable alcohol disorder. Providers offered 7% a referral for their drinking behavior. Forty percent of cases received education about risks associated with alcohol consumption.

Alcohol screening results for 2014 suicide cases with a current PHA (n=119) are described below and in Table D-13. A PHA is considered current if it has been less than 15 months since the last PHA was completed.

- **Unhealthy Drinking:** Nine percent of 2014 cases screened positive for unhealthy drinking.
- **Probable Alcohol Disorder:** No Soldiers screened positive for a probable alcohol disorder.

- **Referrals:** Providers offered 4% of cases referrals for their drinking behavior.

- **Alcohol Education:** One-third of cases (33%) received education about risks related to drinking.

5.5.4 Behavioral Health Encounters

Of suicide cases from 2001 through 2014, 19% had an inpatient BH encounter and 66% had an outpatient BH encounter during their military career. Within the 30 days preceding the event, 30% had a BH encounter.

BH encounters during military service among suicide cases from 2014 are described below and in Table D-14 (see Appendix C for encounter definitions).

- **Inpatient BH Encounters:** Almost a quarter (22%) had an inpatient BH encounter during their military career.

- **Outpatient BH Encounters:** Many (79%) had an outpatient BH encounter since accession.

- **BH Encounter in Previous 30 Days:** In the 30 days preceding the event, 41% had a BH encounter.

The proportion of inpatient and outpatient encounters among suicide cases for 2014 (22% and 79%, respectively) was higher than the proportion among the cumulative time period 2001-2014 (19% and 66%, respectively). In addition, the proportion of cases in 2014 with BH encounters in the 30 days before their death (41%) was higher than the proportion among cases for 2001-2014 (30%).

5.5.5 Behavioral Health Diagnoses

Of suicide cases from 2001 through 2014, 51% had a BH diagnosis since accession. Thirty-one percent of suicide cases received a BH diagnosis in the year before their death. One-third (31%) had received more than one diagnosis. A mood disorder was diagnosed in 26% of suicide cases, including major depression (12%) and other depressive disorders (23%). Bipolar disorder was diagnosed in 4% of cases. The prevalence of PTSD and other anxiety disorders was 10% and 16%, respectively. Thirty-two percent of cases had adjustment disorder, which was the highest prevalence of any BH disorder among suicide cases. Substance use disorders (alcohol, drug, or both) were diagnosed in 22% of cases. Diagnoses of personality disorders and psychoses were relatively uncommon (5% and 2%, respectively). An E-code documented previous suicide attempt or self-harm in 8% of suicide cases; 5% had a documented E-code in the year before their death. Seven percent of cases had a V-code indicating a prior suicidal ideation; 5% had a documented V-code in the year before their death.

BH diagnoses during military service among suicide cases from 2014 are described below and in Table D-14 and Figure 6 (see Appendix C for diagnosis definitions). Differences relative to 2012 or 2013 are noted only when significant.

- **Any BH Diagnosis:** Over half (60%) had received a BH diagnosis since accession. Of these, 31% were first diagnosed in the year preceding their death; 29% of cases had an initial BH diagnosis more than a year before their death (Figure 5).

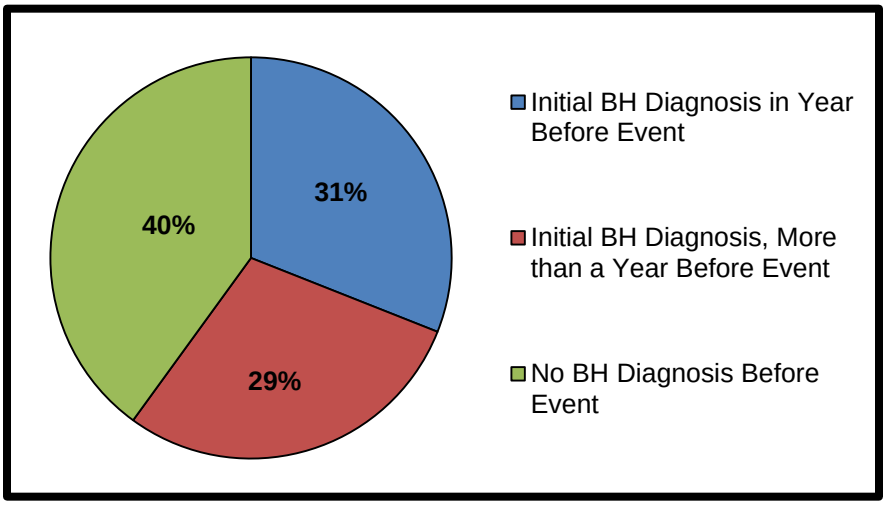

Figure 5. Time of Behavioral Health Diagnosis, Suicide Cases, U.S. Army, 2014

- **More Than One BH Diagnosis:** Two-fifths (40%) received more than one BH diagnosis over the course of their military career. Eleven percent of suicide cases first received more than one BH diagnosis in the year before their death.

- **Mood Disorders:** A mood disorder was diagnosed in 38% of 2014 suicide cases; 17% were first diagnosed in the year before their death.

- **Major Depression and Other Depressive Disorders:** The prevalence of major depression and other depressive disorders was 13% and 34%, respectively, among 2014 suicide cases. The proportion of cases first diagnosed with other depressive disorders in the year before their death increased from 2013 (8%) to 2014 (17%, X^2=5.4, p=0.020).

- **Bipolar Disorder:** Few (4%) were diagnosed with bipolar disorder; 3% were diagnosed in the year before their death.

- **Posttraumatic Stress Disorder:** Sixteen percent of cases from 2014 had received a PTSD diagnosis. Few suicide cases (5%) received a diagnosis in the year before their death.

- **Other Anxiety Disorders:** Nearly a quarter (22%) of cases from 2014 had been diagnosed with other anxiety disorders; 7% were first diagnosed in the year before their death.

- **Adjustment Disorders:** Adjustment disorder was diagnosed in 40% of cases from 2014; 13% were first diagnosed in the year before their death.

- **Substance Use Disorders:** One-fourth of cases (25%) from 2014 were diagnosed with a substance use disorder; 8% were first diagnosed in the year before their death.

- **Personality Disorders and Psychoses:** Few 2014 suicide cases had been diagnosed with personality disorders or psychoses (5% and <1%, respectively); 2% and <1% of suicide cases were first diagnosed with personality disorders and psychoses in the year before their death.

- **Previous Suicide Attempt, Self-Harm, and Suicidal Ideation:** Previous suicide attempt or self-harm was documented by an E-code in 9% of 2014 suicide cases. A V-code indicated that 13% of 2014 suicide cases had a history of suicidal ideation. Few (4%) cases from 2014 had a previous suicide attempt or self-harm documented by an E-code in the year before their death. Seven percent of cases had a V-code indicating a prior suicidal ideation in the year before their death.

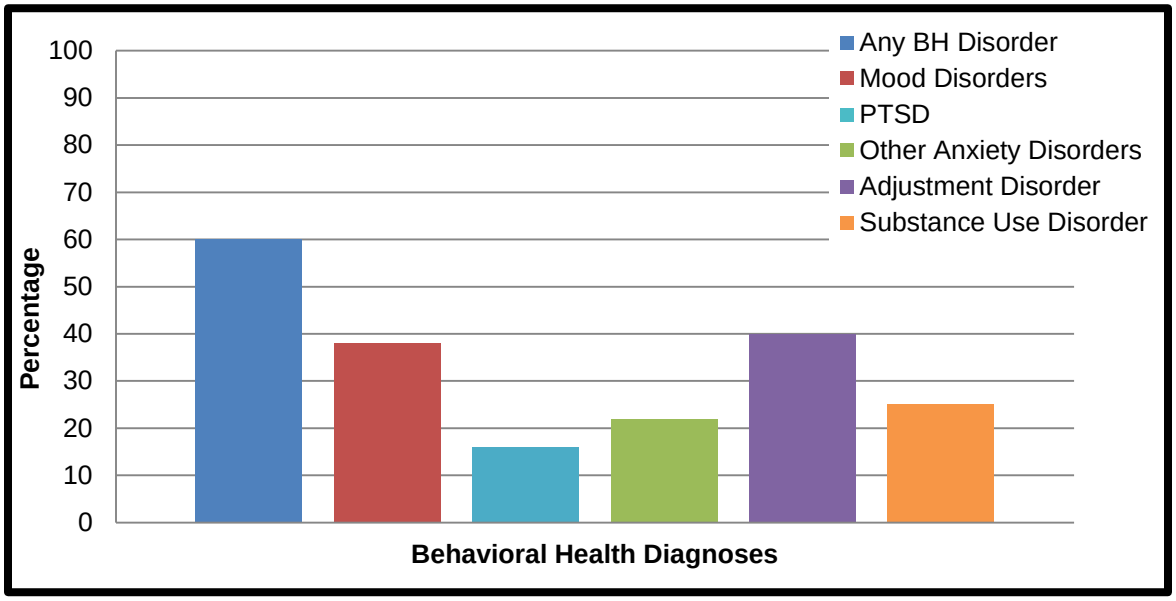

Figure 6. Behavioral Health Diagnoses, Suicide Cases, U.S. Army, 2014

5.6 Other Medical Indicators

Indicators of TBI, pain, and sleep problems are described here and in Tables D-15 through D-17. Polypharmacy is also described below and in Table D-18.

5.6.1 Traumatic Brain Injury

The prevalence of TBI, since accession, among suicide cases from 2001 through 2014 was 12%; 6% were first diagnosed within a year of the suicide. Few (4%) ever had an inpatient TBI encounter and 11% ever had an outpatient TBI encounter. In the year before their death, 8% had a medical encounter for TBI, 4% within 30 days of death.
TBI among suicide cases from 2014 are described below and in Table D-15.

- **TBI Diagnoses:** TBI was diagnosed in 16% of 2014 suicide cases some time in their military career; 6% were first diagnosed within a year of their death.

- **Medical Encounters for TBI:** During their military career, 3% had an inpatient TBI encounter and 19% an outpatient TBI encounter. In the year before their death, 9% had a medical encounter for TBI. The proportion of cases with a TBI encounter within 30 days of death decreased from 2013 (8%) to 2014 (2%, X^2=4.8, p=0.029).

5.6.2 Pain Indicators

Of suicide cases from 2001 through 2014, 34% had a medical encounter with an ICD-9 code indicating pain, including V-codes (hereafter referred to as a pain encounter), in the year preceding their death and 9% had a pain encounter within 30 days of their death. In the preceding year, 30% received a pain diagnosis (omits V-codes).

Pain indicators among 2014 suicide cases are described below and in Table D-16. Differences relative to 2012 or 2013 are noted only when significant.

- **Medical Encounters for Pain:** In the year preceding the suicide, 42% of 2014 suicide cases had a medical encounter for pain. Five percent of cases had a medical encounter for pain within 30 days of their event, a significant decrease compared to 2012 (13%, χ2=5.3, p=0.021; Figure 7).

- **Pain Diagnoses:** In the year before their death, 37% of 2014 suicide cases received a pain diagnosis.

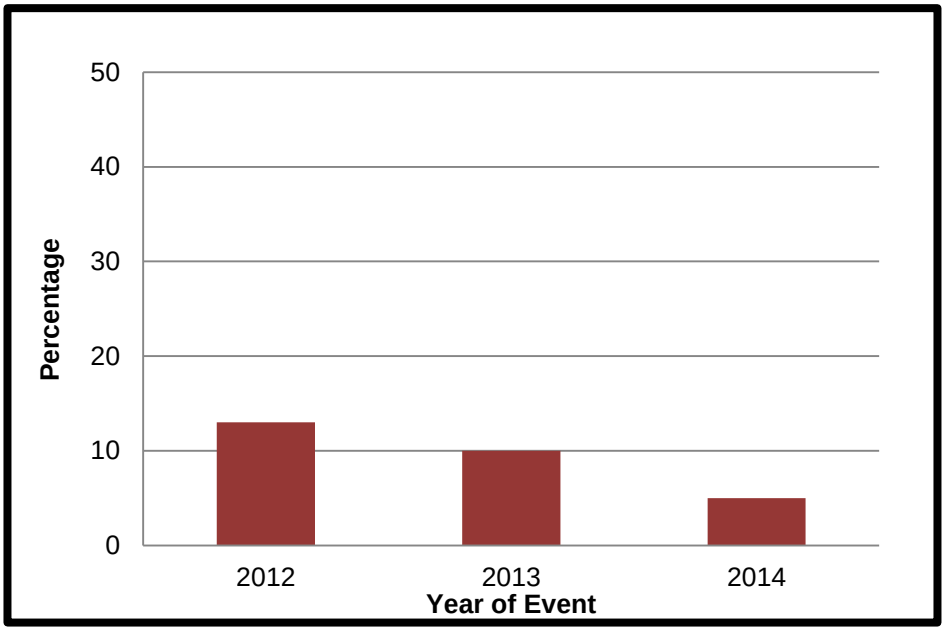

Figure 7. Pain Encounter in Previous 30 Days, Suicide Cases, U.S. Army, 2012–2014

5.6.3 Sleep Problems

Of suicide cases from 2001 through 2014, 16% had a medical encounter with an ICD-9 code indicating sleep problems/concerns, including V-codes (hereafter referred to as a sleep encounter)

in the year preceding their death, and 5% had a sleep encounter within 30 days of their death. In the preceding year, 13% were diagnosed with a sleep disorder (omits V-codes).

Sleep indicators for 2014 suicide cases are described below and in Table D-17.

- **Medical Encounters for Sleep Problems:** In the year before the suicide, 28% of 2014 suicide cases had a medical encounter for sleep problems, 9% within 30 days of their death.

- **Sleep Disorder Diagnoses:** In the year before their death, 24% of 2014 suicide cases were diagnosed with a sleep disorder.

5.6.4 Polypharmacy

Soldiers may meet criteria for polypharmacy under one or more of three definitions (see Figure D-6 for details). Of suicide cases from 2002, when electronic data on prescriptions became available, through 2014, 7% met criteria for polypharmacy at the time of their death; 5% met criteria under a single definition and 2% met criteria under two or more definitions.

Polypharmacy of suicide cases from 2014 is described below and in Table D-18.

- **Any Polypharmacy:** At the time of the event, 8% met criteria for polypharmacy.

- **Polypharmacy by Multiple Definitions:** 82% of suicide cases with polypharmacy met criteria under a single definition; 18% of cases with polypharmacy met criteria for polypharmacy under two or more definitions.

5.7 Drug Testing and ASAP Screening

Of suicide cases from 2001 through 2014 who had drug testing data (n=1613), 5% had ever tested positive for drugs, excluding positive tests for drugs for which the Soldier had a prescription. Of those testing positive for drugs, 22% had more than one positive drug test, and 52% had a positive drug test within a year of their death. Positive tests were primarily for cannabis (49%), cocaine (36%), and amphetamines (17%).

In the year before their death, 10% of the suicide cases from 2001 through 2014 were screened for ASAP intake; of these, 65% enrolled.

Drug testing and ASAP screening of suicide cases from 2014 are described below and in Tables D-19 and D-20. Only significant differences are noted.

- **Positive Drug Tests:** Of suicide cases with drug testing data (n=131), 4% had a positive drug test at some time during their military career (excluding positive tests for drugs for which the Soldier had a prescription). Of these, 20% had two or more positive drug tests, and 60% had a positive drug test within a year of their death.

- **Drugs with Positive Tests:** Positive tests were primarily for cannabis (40%), cocaine (40%) and opiates (20%).

- **ASAP Screening & Enrollment:** In the year preceding the suicide, 10% of cases were screened for intake into the ASAP program. Of these, 64% enrolled in the program.

6 Suicide Attempt Cases

During 2014, 504 Soldiers attempted suicide, as documented by DoDSERs. This is 30 more cases than in 2013 and 152 more cases than in 2012. The difference between 2012 and 2013 may in part be the result of the DoDSER entry system being inoperable January and February 2012.

The crude suicide attempt rate was 77.2 per 100,000 persons (95% CI: 70.4 – 83.9) for 2014. The rate for 2013 was 74.7 per 100,000 persons (95% CI: 67.9 – 81.4); for 2012, the rate was 52.9 per 100,000 persons (95% CI: 47.4 – 58.4). Attempt rates for 2013 and 2014 are higher than in previous years, although not as high as the years 2005 through 2008 (Figure 8). This may in part be a result of better reporting, with greater emphasis being placed on completion of DoDSERs for nonfatal suicidal events.

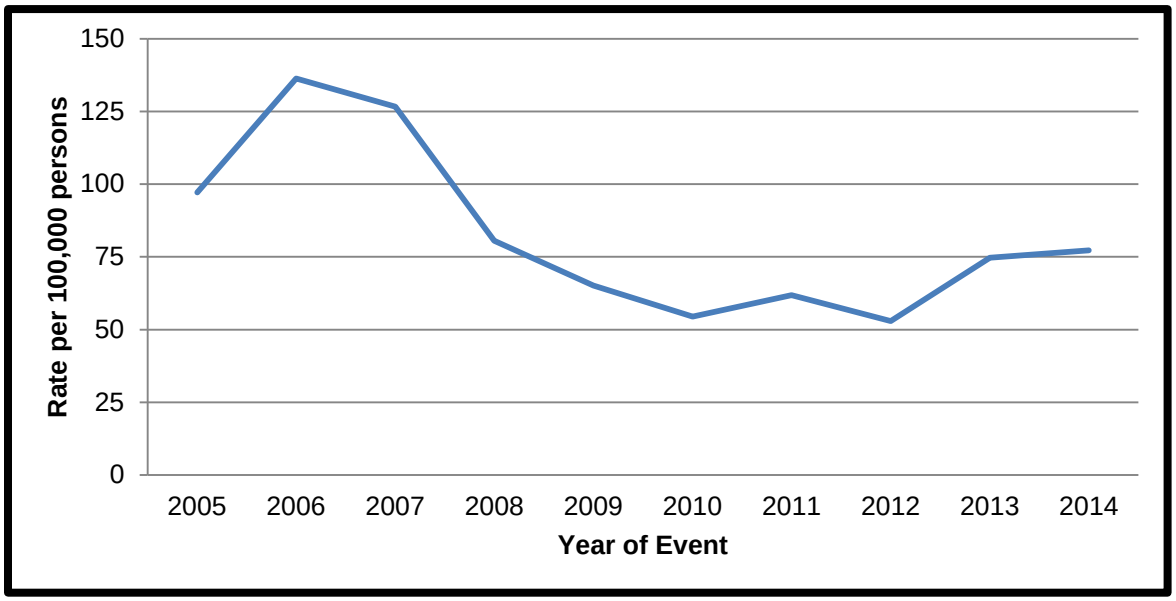

Figure 8. Crude Suicide Attempt Rate, per 100,000, U.S. Army, 2004–2014

6.1 Demographic Characteristics

Among Soldiers who attempted suicide from 2004, when attempts were first documented, through 2014, the most common characteristics were male (74%), 17 to 24 years of age (61%), and non-Hispanic white (65%).

Demographic characteristics of suicide attempt cases from 2014 and stratified suicide attempt rates for 2014 are described below and in Tables E-1 through E-4 and Figures E-1 through E-3. Differences relative to 2012 or 2013 are noted only when significant.

During 2014, 504 Soldiers attempted suicide. Of these:

- 76% were male
- 51% were 17–24 years of age
- 55% were non-Hispanic white
- 91% were Regular Army
- 64% were in the E1–E4 ranks

- **Sex:** Most (76%) suicide attempts were among male Soldiers, which is to be expected since most Soldiers are male. Female Soldiers have higher suicide attempt rates: 126.1 per 100,000 compared to 68.7 per 100,000 for male Soldiers. The count of suicide attempts among female Soldiers is lower than the count among male Soldiers, but because the population of women in the Army is smaller, the rate is higher.

- **Age Group:** The greatest proportion of suicide attempts were made by Soldiers 17 to 24 years of age (51%) or 25 to 34 years of age (36%). In contrast, the greatest proportion of suicide cases were among Soldiers 25-34 (46%). Suicide attempt rates stratified by age group were: 17–24 years, 135.9 per 100,000; 25–34 years, 72.5 per 100,000; 35–64 years, 30.5 per 100,000.

- **Race-Ethnicity:** The majority (55%) of suicide attempts were among non-Hispanic white Soldiers (Figure 9). This was a significant decrease compared to 2013 (65%), with increases in the proportions of Soldiers in the Hispanic and non-Hispanic black categories ($\chi 2=13.8$, $p=0.008$). Suicide attempt rates by race-ethnicity were: non-Hispanic white, 69.5 per 100,000; non-Hispanic black, 81.3 per 100,000; Hispanic, 114.2 per 100,000; non-Hispanic Asian/Pacific Islander, 78.4 per 100,000. The small number of suicide attempts among non-Hispanic Native American/Alaska Native Soldiers resulted in rates too unstable to report.

- **Marital Status:** Approximately half of Soldiers with suicide attempts were single (47%) and half were married (46%).

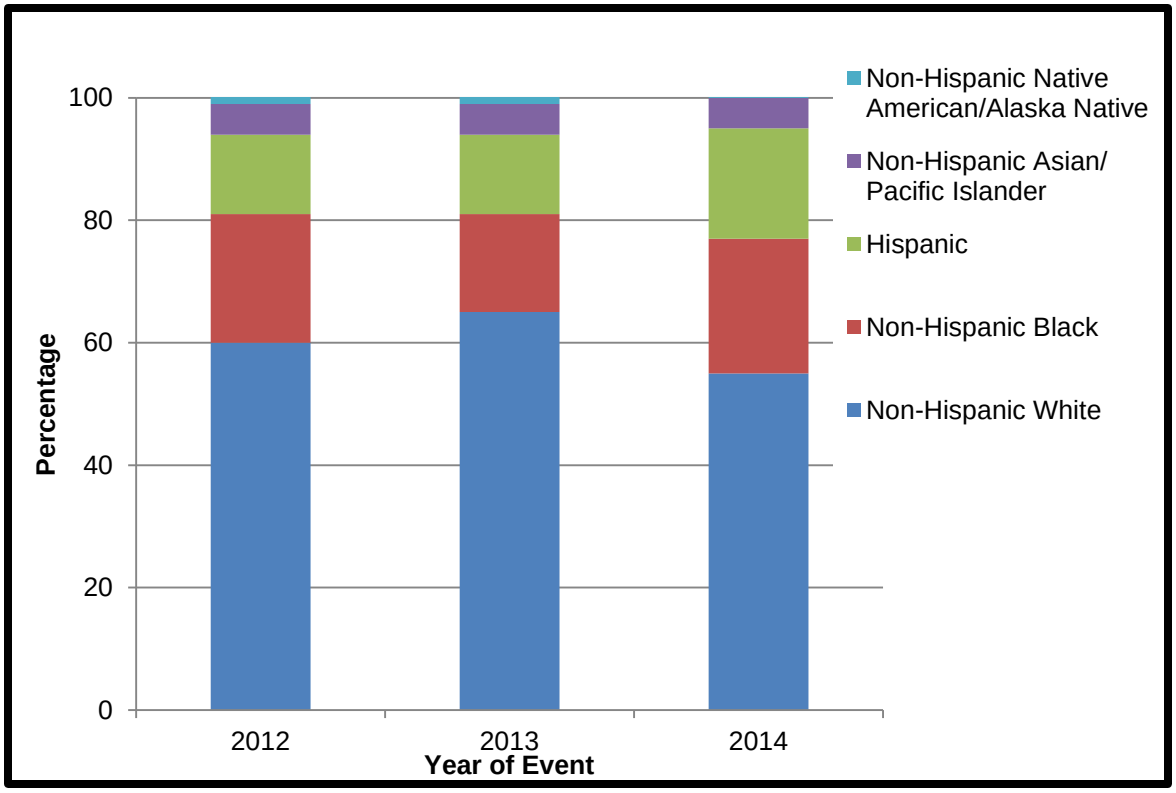

Figure 9. Race-Ethnicity, Suicide Attempts, U.S. Army, 2012–2014

6.2 Military Characteristics

The majority of suicide attempts from 2004 through 2014 were by Regular Army Soldiers (89%) and Soldiers in the E1–E4 ranks (77%). Most (55%) had never deployed in support of OEF, OIF, or OND or had deployed only once (28%).

Military characteristics of suicide attempt cases and stratified rates of suicide attempts for 2014 are described below and in Tables E-5 through E-7 and Figures E-4 and E-5. Differences relative to 2012 or 2013 are noted only when significant.

- **Component:** The greatest proportion of suicide attempts occurred among Regular Army Soldiers (91%). Suicide attempt rates by component were: Regular Army, 90.7 per 100,000; activated National Guard, 30.5 per 100,000. The small number of suicide attempts among Army Reserve Soldiers resulted in a rate too unstable to report.

- **Rank:** Most suicide attempt cases were from the E1–E4 ranks (64%). This was a significant decrease from 2012 (71%), with increases in the proportions of Soldiers in the E5–E9 and O1–O3 ranks (p=0.042, Fisher's exact test [FET]). In contrast, most suicide cases occurred among the E5-E9 ranks (48%). Suicide attempt rates stratified by rank were: E1–E4, 136.5 per 100,000; E5–E9, 51.8 per 100,000; O1–O3, 35.6 per 100,000. The small numbers of suicide attempts among Senior and Warrant Officers resulted in rates too unstable to report.

- **Lifetime History of OEF/OIF/OND Deployment:** Most suicide attempt cases had never deployed (50%) or had deployed only once (23%). The proportion of suicide attempt cases with a history of an OEF, OIF, or OND deployment decreased in 2014 (50%) compared to 2013 (59%, X^2=8.5, p=0.004) and 2012 (57%, X^2=4.3, p=0.038). However the proportion of cases with three or more deployments (15%) increased in 2014 compared to 2012 (10%, X^2=15.0, p=0.005) and 2013 (11%, X^2=19.7, p=0.001).

6.3 Event Characteristics

Most suicide attempts from 2004 through 2014 occurred in the United States (83%). The primary method used among suicide attempts was drug or alcohol overdose (53%).

Event characteristics of suicide attempts from 2014 are described below and in Tables E-8 and E-9.

- **Location:** The majority (81%) of suicide attempts occurred in the United States, a significant decrease compared to 2012 (88%, X^2=58.2, p<0.001) and 2013 (90%, X^2=16.2 p<0.001). The proportion of suicide attempts that occurred in Europe and Korea in 2014 (14%) increased when compared to 2012 (4%, X^2=58.2, p<0.001) and 2013 (7%, X^2=16.2, p<0.001).

- **Communication:** Among suicide attempt cases, 24% communicated suicidal intentions prior to their attempt.

- **Method:** The most common method of suicide attempt was drug/alcohol overdose (50%), followed by hanging/asphyxiation (13%). In 2014, there was a significant increase in the proportion of Soldiers who attempted suicide by overdose (50%), cutting (12%), and gunshot wound (10%) methods when compared to 2012 (47%, 10%, and 6% respectively, X^2=33.2, p<.001).

- **Alcohol or Drug Involvement:** Half (50%) of suicide attempts involved drugs, and 29% involved alcohol.

6.4 Stressors

Of suicide attempt cases from 2004 through 2014, 70% had one or more stressors, which occurred within a year before their suicide attempt. Individual stressors with the highest prevalence included ever being a victim of abuse (56%), relationship problems (41%), work stress (35%), and legal stressors (28%).

The following stressors were reported among suicide attempt cases from 2014. All stressors occurred within a year before the Soldier's event unless otherwise noted. Differences relative to 2013 are noted only when significant. Additional information is presented in Table E-10 and Figure 10.

- **Any Stressor:** Stressors were reported among 82% of suicide attempt cases.

- **Relationship Stressors:** Half (51%) of suicide attempt cases reported relationship problems.

- **Legal Stressors:** A legal stressor affected 31% of suicide attempt cases. The legal issues with the highest prevalence were Article 15 actions (15%), followed by administrative separations (12%) and civil legal problems (8%).

- **Health-Related Stressors:** Physical health problems affected 16% of suicide attempt cases, a significant decrease compared to 2013 (21%, X^2=4.6, p=0.032). Eleven percent had been the subject of a medical evaluation board, which was significantly less when compared to 2013 (15%, X^2=5.5, p=0.019). Family health problems were an issue for 6% of suicide attempt cases. One-fifth (21%) experienced the death of a family member or friend, and 7% had a family member or friend who died by suicide in the year before their suicide attempt. Twenty-two percent of suicide attempt cases had ever had a family member or friend die by suicide, while only 2% of suicide cases experienced the suicide of a family member or friend.

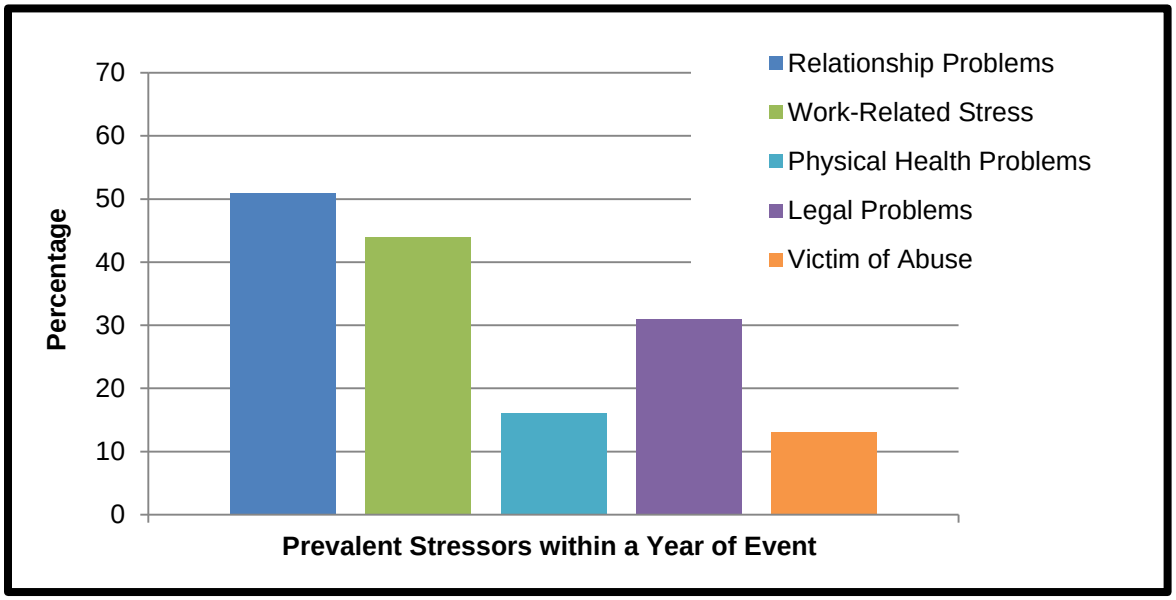

Figure 10. Prevalent Stressors, Suicide Attempt Cases, U.S. Army, 2014

- **Work and Financial Stressors:** Work-related stress was reported for 44% of suicide attempt cases, and 9% experienced financial stress.

- **Victims and Perpetrators of Abuse:** Thirteen percent of suicide attempt cases were a victim of abuse within a year before their event, and 6% were perpetrators of abuse. Nearly two-thirds (63%) had been the victim of abuse sometime in their lives, including 25% who had experienced emotional abuse, 21% who were victims of physical abuse, and 17% who were victims of sexual abuse. In comparison, less than one-fifth (15%) of suicide cases were ever victims of abuse.

- **Suicide Prevention Training and Use of Army Counseling Services:** Almost three-fourths (70%) of suicide attempt cases had ever received suicide prevention training. Seventeen percent of cases utilized the Army Substance Abuse Program (ASAP) and 5% used the Family Advocacy Program, within a year before their event.

6.5 Behavioral Health Indicators

BH indicators from the PDHA, first implemented in 2004, the PDHRA, implemented in 2005, and the latest version of the PHA, implemented in 2009, are described here and in Tables E-11 and E-12. BH encounters and specific diagnoses are described below and in Table E-13. Differences relative to 2012 or 2013 are noted only when significant.

6.5.1 Post-Deployment Health Assessment

Of suicide attempt cases from 2004 (the first year the PDHA was implemented) through 2014 who had deployed and completed a PDHA in the year before the attempt (n=789), 52% reported depression symptoms, 40% reported posttraumatic stress symptoms, and 8% reported suicidal thoughts. Providers referred 23% to BH care. There were, on average, 6 months between completion of the PDHA and the attempt.

BH indicators for suicide attempt cases from 2014 with a PDHA (n=46) are described below and in Table E-11. On average, 6 months elapsed between the PDHA and the event.

- **Depression Symptoms:** Over half (57%) reported depression symptoms.
- **Posttraumatic Stress:** Half (50%) reported symptoms of posttraumatic stress.
- **Suicidal Thoughts:** Nine percent reported suicidal thoughts.
- **Referrals:** Providers referred 39% to BH care.

6.5.2 Post-Deployment Health Reassessment

Among the suicide attempt cases from 2006 (the first year the ABHIDE contains PDHRA data) through 2014 with PDHRA information (n=610), 63% reported depression symptoms, 45% reported posttraumatic stress symptoms, and 5% reported suicidal thoughts. Providers referred 22% to BH care. There were, on average, 5 months between the PDHRA and the event.

BH indicators for suicide attempt cases from 2014 with a PDHRA within one year of the attempt (n=41) are described below and in Table E-11. On average, 6 months elapsed between the PDHRA and the event.

- **Depression Symptoms:** Half (51%) reported depression symptoms, significantly less than in 2013 (73%, X^2=5.4, p=0.021).
- **Posttraumatic Stress:** A little less than half (49%) reported symptoms of posttraumatic stress.
- **Suicidal Thoughts:** Seven percent reported suicidal thoughts.
- **Referrals:** Providers referred 29% to BH care.

6.5.3 Periodic Health Assessment

Among the suicide attempt cases from 2008 (the first year the ABHIDE contains PHA data) through 2014 with a PHA in the 15 months before their attempt (n=1576), 9% screened positive for unhealthy drinking, with 2% screening positive for a probable alcohol disorder. Providers offered 9% a referral for their drinking behavior. Approximately one-third (34%) received education about risks associated with alcohol consumption.

Alcohol screening results for 2014 suicide attempt cases with a current PHA (n=379) are described below and in Table E-12. A PHA is considered current if it has been less than 15 months since the last PHA was completed.

- **Unhealthy Drinking:** Eight percent of cases screened positive for unhealthy drinking.
- **Probable Alcohol Disorder:** Few (1%) screened positive for a probable alcohol disorder.
- **Referrals:** Providers offered 3% of cases referrals for their drinking behavior.
- **Alcohol Education:** Thirty-five percent of cases received education about risks related to drinking.

6.5.4 Behavioral Health Encounters

Of suicide attempt cases from 2004 through 2014, 29% had an inpatient BH encounter and 80% had an outpatient BH encounter before their attempt. Within the 30 days before the event, 59% had a BH encounter.

BH encounters during military service among suicide attempt cases from 2014 are described below and in Table E-13 (see Appendix C for encounter definitions).

- **Inpatient BH Encounters:** Almost one-third (32%) had an inpatient BH encounter during their military career.
- **Outpatient BH Encounters:** Most (84%) had an outpatient BH encounter since accession.
- **BH Encounter in Previous 30 Days:** In the 30 days preceding the event, 61% had a BH encounter.

6.5.5 Behavioral Health Diagnoses

Of suicide attempt cases from 2004 through 2014, 71% had received a BH diagnosis since accession and before the event. Over half (57%) of suicide attempt cases were first diagnosed in the year before their attempt. Half (49%) had received more than one diagnosis. A mood disorder was diagnosed in 45%, including major depression (22%) and other depressive disorders (38%). Bipolar disorder was diagnosed in 5% of cases. The prevalence of PTSD and other anxiety disorders was 14% and 24%, respectively. Fifty-one percent of cases had adjustment disorder, which was the highest prevalence of any BH disorder among suicide attempt cases. Substance use disorders were diagnosed in 26% of suicide attempt cases. Diagnoses of personality disorders and psychoses were relatively uncommon (10% and 3%, respectively). An E-code documented previous suicide attempt or self-harm in 13% of suicide attempt cases; 11% had a documented E-

code in the year before their attempt. Fifteen percent of cases had a V-code for previous suicidal ideation; 13% of cases had a documented V-code in the year before their attempt.

BH diagnoses during military service among suicide attempt cases from 2014 are described below and in Table E-13 and Figure 11 (see Appendix C for diagnosis definitions). Differences relative to 2012 or 2013 are noted only when significant.

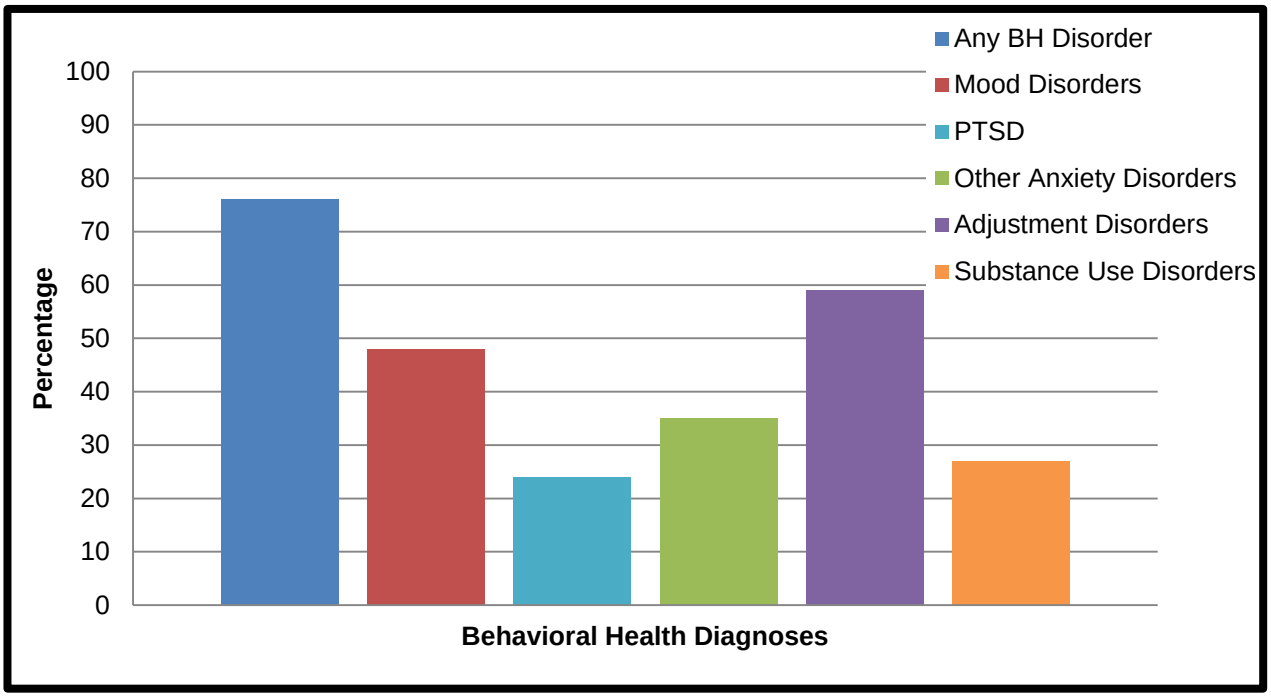

Figure 11. Behavioral Health Diagnoses, Suicide Attempt Cases, U.S. Army, 2014

- **Any BH Diagnosis:** Many 2014 cases (76%) had received a BH diagnosis since accession. Of these, more than half (57%) of cases were first diagnosed in the year before their attempt (Figure 12), and 19% of cases had an initial BH diagnosis more than a year before their attempt.

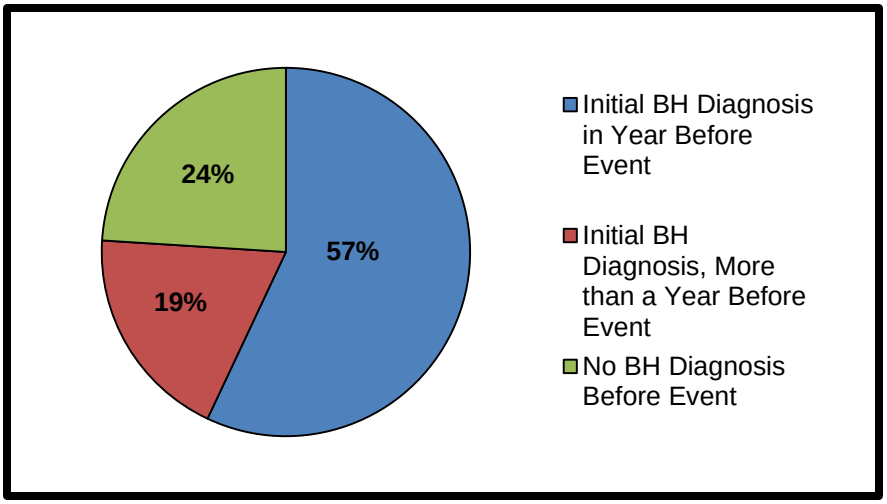

Figure 12. Time of Behavioral Health Diagnosis, Suicide Attempt Cases, U.S. Army, 2014

- **More Than One BH Diagnosis:** Over half (56%) received more than one BH diagnosis over the course of their military career. A little less than one-third (31%) of suicide attempt cases were first diagnosed with more than one BH diagnosis in the year before their attempt.

- **Mood Disorders:** A little less than half (48%) of 2014 suicide attempt cases had been diagnosed with a mood disorder; 27% of cases were first diagnosed in the year before their attempt.

- **Major Depression and Other Depressive Disorders:** The prevalence of major depression was 26% and of other depressive disorders was 39% among 2014 suicide attempt cases; 16% of cases were first diagnosed with major depression in the year before their attempt and 22% of cases were first diagnosed with other depressive disorders in the year before their attempt.

- **Bipolar Disorder:** Few (3%) were diagnosed with bipolar disorder, which was a significant decrease from 2013 (6%, X^2=4.3, p=0.038). The proportion of cases first diagnosed with bipolar disorder in the year before their attempt decreased from 2013 (4%) to 2014 (2%, X^2=4.0, p=0.045).

- **Posttraumatic Stress Disorder:** Nearly a quarter (24%) of cases from 2014 had received a PTSD diagnosis; 14% of cases were first diagnosed in the year before their attempt.

- **Other Anxiety Disorders:** Over one-third (35%) of 2014 cases had been diagnosed with an anxiety disorder; one-fifth (20%) of cases were first diagnosed in the year before their attempt.

- **Adjustment Disorders:** The proportion of cases diagnosed with adjustment disorder decreased from 2012 (66%) to 2014 (59%, X^2=4.5, p=0.034). Thirty-one percent of 2014 suicide attempt cases were first diagnosed in the year before their attempt.

- **Substance Use Disorders:** The prevalence of substance use disorders was 27%; 13% of cases were first diagnosed in the year before their attempt.

- **Personality Disorders:** The prevalence of personality disorders was 7%. The proportion of cases first diagnosed with a personality disorder in the year before their attempt increased from 2013 (3%) to 2014 (6%, X^2=4.1, p=0.042).

- **Psychoses:** Few (2%) cases were diagnosed with psychoses in 2014. The proportion of cases first diagnosed with psychoses in the year before their attempt decreased from 2012 (3%) to 2014 (1%, X^2=5.3, p=0.022).

- **Previous Suicide Attempt, Self-Harm, or Suicidal Ideation:** Previous suicide attempt or self-harm was documented by an E-code in 10% of 2014 suicide attempt cases, which was significantly less than in 2013 (14%, X^2=4.4, p=0.035). A V-code indicated that 25% had a history of suicidal ideation. Eight percent of cases from 2014 had a previous suicide attempt or self-harm documented by an E-code in the year before their attempt. One-fifth (21%) of cases had a V-code indicating a prior suicidal ideation in the year before their attempt.

6.6 Other Medical Indicators

Indicators of TBI, pain, and sleep problems are described here and in Tables E-14 through E-16. Polypharmacy is also described below and in Table E-17.

6.6.1 Traumatic Brain Injury

The prevalence of TBI, diagnosed since accession, among suicide attempt cases from 2004 through 2014 was 10%; 4% of cases were first diagnosed in the year before the attempt. Few Soldiers (2%) ever had an inpatient TBI encounter and 11% ever had an outpatient TBI encounter. In the year before their suicide attempt, 6% had a medical encounter for TBI, 2% in the 30 days before the suicidal event.

TBI among suicide attempt cases from 2014 are described below and in Table E-14. Only significant differences are noted.

- **TBI Diagnoses:** TBI was diagnosed in 14% of 2014 suicide attempt cases some time in their military career, which was significantly less than in 2012 (19%, X^2=4.3, p=0.039; Figure 13); 5% of cases were first diagnosed in the year preceding the attempt.

- **Medical Encounters for TBI:** During their military career, 2% had an inpatient TBI encounter and 14% had an outpatient TBI encounter. In the year before the suicide attempt, 8% had a TBI encounter, which was significantly less than in 2012 (12%, X^2=4.4, p=0.035). Few cases (2%) had a TBI encounter within the 30 days before the event.

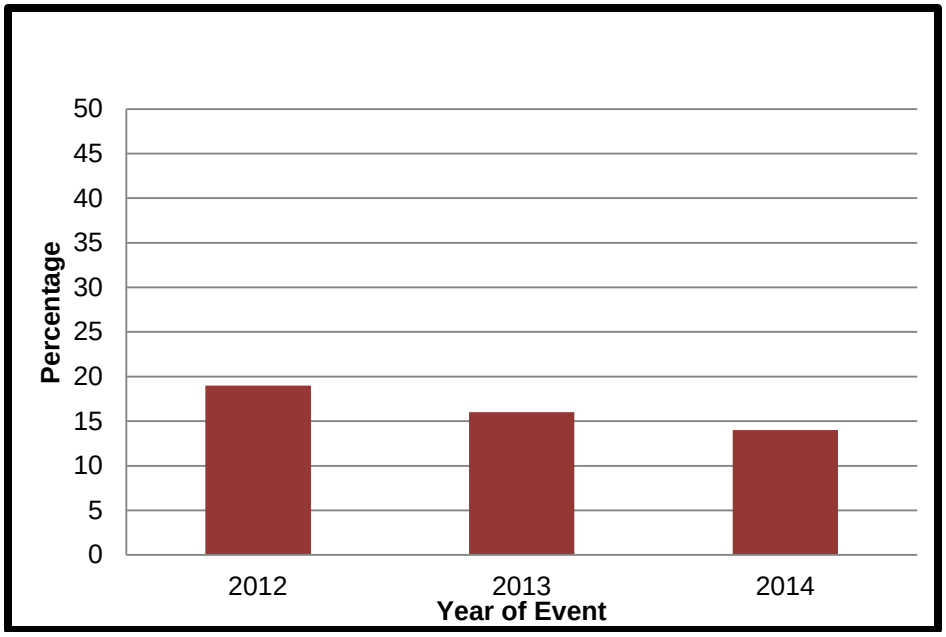

Figure 13. TBI Diagnosis, Ever, Suicide Attempt Cases, U.S. Army, 2012–2014

6.6.2 Pain Indicators

Of suicide attempt cases from 2004 through 2014, 47% had a pain encounter in the year preceding their attempt, 18% in the previous 30 days. In the preceding year, 42% received a pain diagnosis.

Pain indicators among 2014 suicide attempt cases are described below and in Table E-15. Differences relative to 2012 and 2013 are noted only when significant.

- **Medical Encounters for Pain:** In the year preceding their suicide attempt, 51% of 2014 suicide cases had a medical encounter for pain. Sixteen percent of cases had a pain encounter within 30 days of their attempt, which was a significant decrease compared to 2012 (21%, X^2=4.7, p=0.031) and 2013 (25%, χ2=12.2, p<0.001).

- **Pain Diagnoses:** In the year before the event, 46% of suicide attempt cases received a pain diagnosis, a significant decrease compared to 2013 (53%, χ2=4.0, p=0.046).

6.6.3 Sleep Problems

Of suicide attempt cases from 2004 through 2014, 21% had a sleep encounter in the year preceding their attempt, 8% in the preceding 30 days. In the preceding year, 16% were diagnosed with a sleep disorder.

Sleep indicators among 2014 suicide attempt cases are described below and in Table E-16.

- **Medical Encounters for Sleep Problems:** In the year before the suicide attempt, 35% of 2014 suicide attempt cases had a medical encounter for sleep problems, 12% within 30 days of their death.

- **Sleep Disorder Diagnoses:** In the year before the suicide attempt, 28% of 2014 suicide attempt cases were diagnosed with a sleep disorder.

6.6.4 Polypharmacy

At the time of their suicide attempt, 14% of suicide attempt cases from 2004 through 2014 met criteria for polypharmacy. This included 9% who met criteria under a single definition, and 4% who met criteria under more than one definition (see Figure D-6 for details).

Polypharmacy of suicide attempt cases from 2014 is described below and in Table E-17.

- **Any Polypharmacy:** At the time of their suicide attempt, 13% of cases met criteria for polypharmacy. This was a significant decrease compared to 2013 (18%, X^2=4.0, p=0.046; Figure 14).

- **Polypharmacy by Multiple Definitions:** Sixty-eight percent of suicide attempt cases with polypharmacy met criteria under a single definition; 32% of suicide attempt cases with polypharmacy met criteria for polypharmacy under two or more definitions.

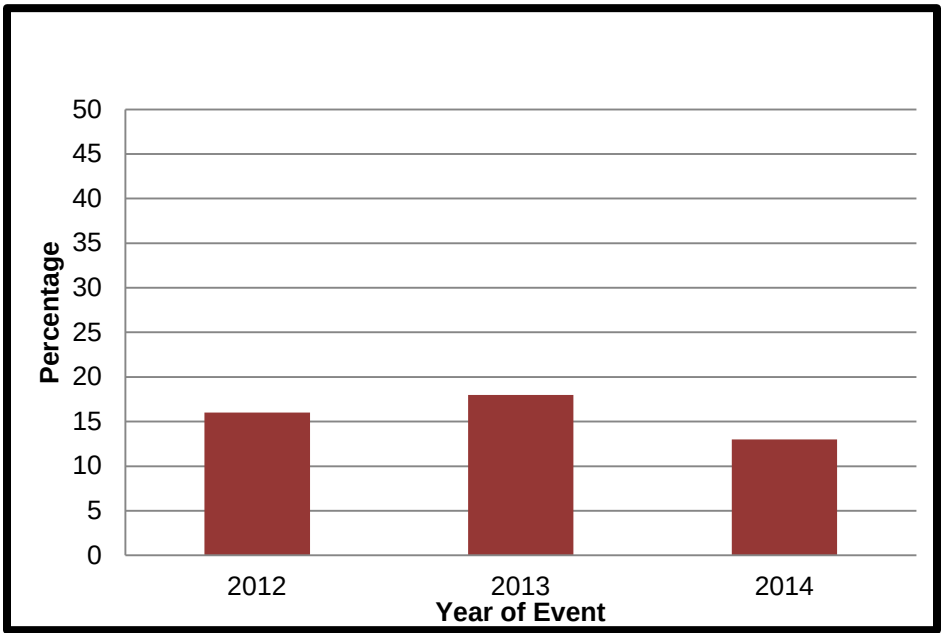

Figure 14. Polypharmacy at Time of Event, Suicide Attempt Cases, U.S. Army, 2012–2014

6.7 Drug Testing and ASAP Screening

Of suicide attempt cases from 2004 through 2014 with drug testing data (n=4863) 9% had ever tested positive for drugs, excluding positive tests for drugs for which the Soldier had a prescription. Of these, 31% had more than one positive drug test, and 78% had a positive drug test in the year before their suicide attempt. Positive tests were primarily for cannabis (47%) and cocaine (37%).

In the year before their suicide attempt, 14% of Soldiers were screened for intake into the ASAP program; 75% of those screened enrolled in the program.

Drug testing and ASAP screening of suicide attempt cases from 2014 are described below and in Tables E-18 and E-19. Only significant differences are noted.

- **Positive Drug Tests:** Of suicide attempt cases with drug testing data (n=467), 7% had a positive drug test at some time during their military career (excluding positive tests for drugs for which the Soldier had a prescription). Of these, 35% had two or more positive drug tests, and 82% had a positive test in the year preceding their attempt.
- **Drugs with Positive Tests:** Positive tests were primarily for cannabis (44%) and oxycodone (21%).
- **ASAP Screening & Enrollment:** In the year before their suicide attempt, 16% of 2014 cases were screened for intake into the ASAP program; 82% of those screened enrolled in the program.

7 Suicidal Ideation Cases

During 2014, 1040 suicidal ideation cases were documented by DoDSERs. This is 139 more cases than in 2013 and 268 more than in 2012. The large difference between 2013 and 2012 may in part be the result of the DoDSER entry system being inoperable during January – February 2012.

The crude rate of suicidal ideation was 159.3 per 100,000 persons (95% CI: 149.6 – 168.9) for 2014, the highest observed rate since suicidal ideation cases became available in 2007 (Figure 15). This increase may be the result of increased attention to documentation.

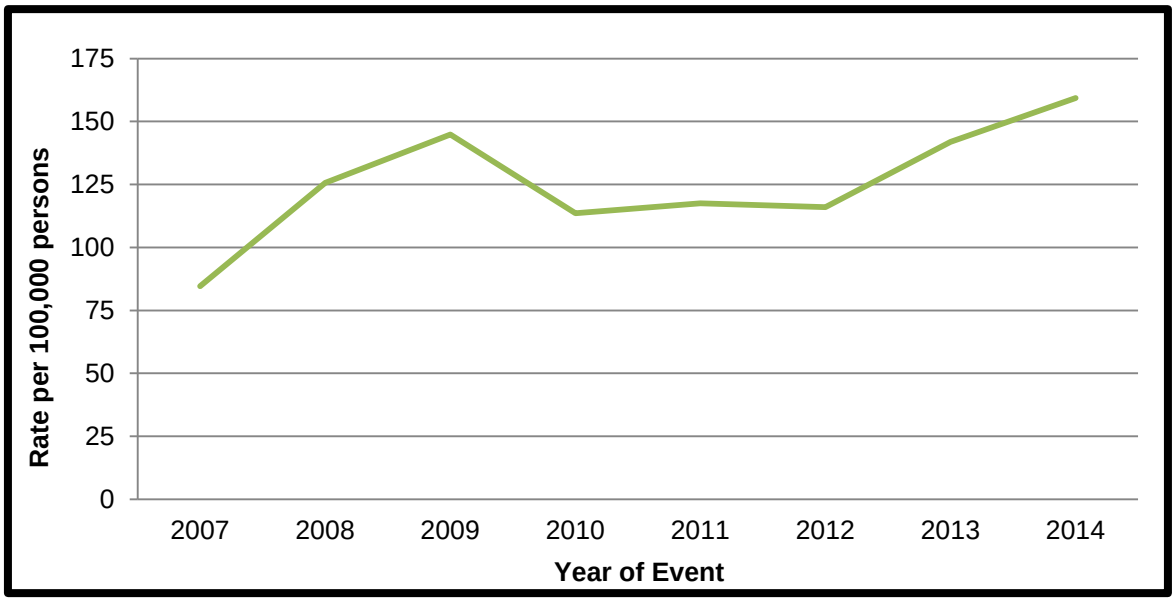

Figure 15. Crude Suicidal Ideation Rate, per 100,000, U.S. Army, 2007–2014

7.1 Demographic Characteristics

The most common characteristics of suicidal ideation cases from 2007, when ideations were first documented, through 2014, were male (79%), 17 to 24 years of age (57%), and non-Hispanic white (65%).

Demographic characteristics of suicidal ideation cases from 2014 and stratified suicide ideation rates for 2014 are described below and in Tables F-1 through F-4 and Figures F-1 through F-3. Differences relative to 2012 or 2013 are noted only when significant. The demographic characteristics of suicidal ideation cases from 2014 are very similar to the demographic characteristics of suicide attempt cases from 2014.

- **Sex:** Most (78%) suicidal ideations were among male Soldiers. Suicidal ideation rates stratified by sex were 145.6 per 100,000 for males and 238.7 per 100,000 for females. The count of suicidal ideations among female Soldiers is lower than the count among male Soldiers, but because the population of women in the Army is smaller, the rate is higher.

- **Age Group:** The greatest proportion of Soldiers who expressed suicidal ideations were 17 to 24 years of age (50%) or 25 to 34 years of age (34%). Suicidal ideation rates by age group are 17–24 years, 276.6 per 100,000; 25–34 years, 140.1 per 100,000; and 35–64 years, 77.3 per 100,000.

During 2014, 1,040 Soldiers expressed suicidal ideations. Of these:

- 78% were male
- 50% were 17–24 years of age
- 58% were non-Hispanic white
- 90% were Regular Army
- 66% were E1–E4

- **Race-Ethnicity:** The majority (58%) of suicidal ideations were among non-Hispanic white Soldiers. This was a significant decrease compared to 2012 (65%) with increases in the proportions of Soldiers in the Hispanic (11% to 15%) and non-Hispanic black (17% to 21%) race-ethnicity categories (X^2=11.7, p=0.020). Suicidal ideation rates for Soldiers by race-ethnicity were non-Hispanic white, 152.4 per 100,000; non-Hispanic black, 160.4 per 100,000; Hispanic, 199.2 per 100,000; and non-Hispanic Asian/Pacific Islander, 173.2 per 100,000. The small number of cases among non-Hispanic Native American/Alaskan Native Soldiers resulted in a suicidal ideation rate too unstable to report (Figure 16).

- **Marital Status:** There was a significant change in the distribution of marital status from 2012 to 2014, with the proportion of cases who were single decreasing from 52% to 45% and the proportion who were married increasing from 42% to 48% (X^2=12.1, p=0.007).

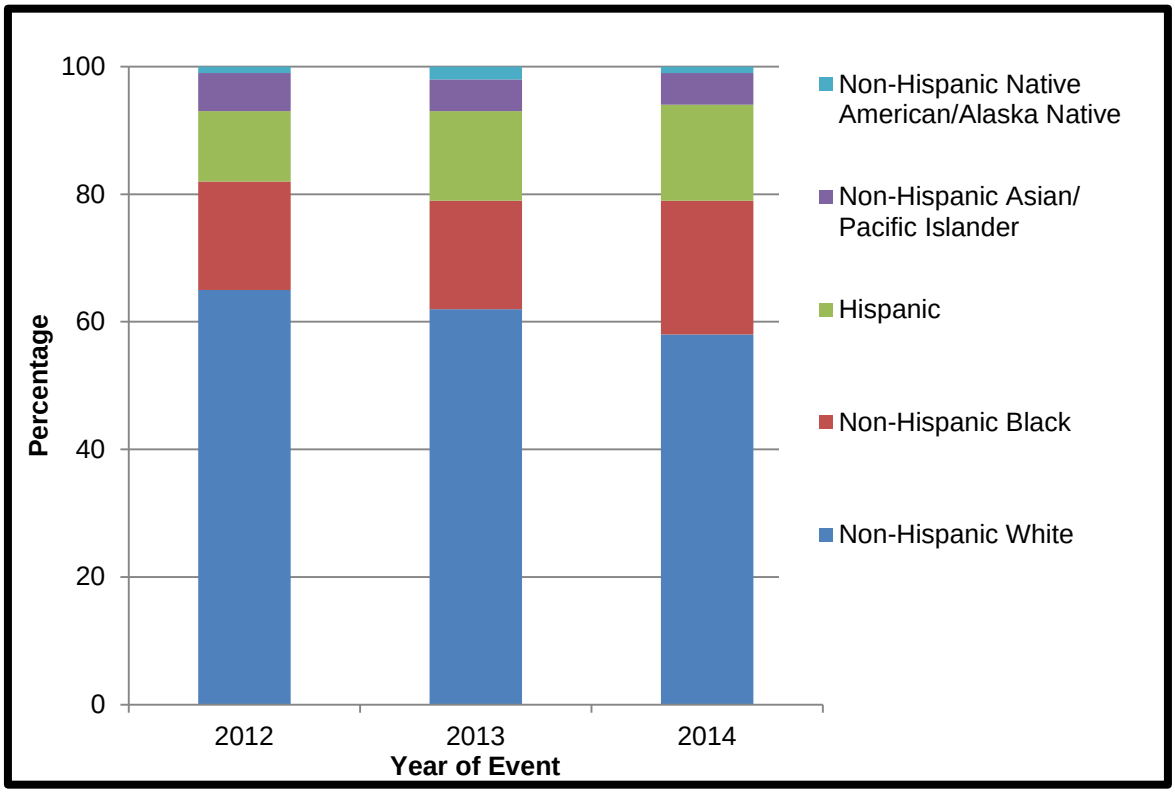

Figure 16. Race-Ethnicity, Suicidal Ideation Cases, U.S. Army, 2012–2014

7.2 Military Characteristics

Most suicidal ideation cases from 2007 through 2014 were Regular Army Soldiers (86%) in the E1–E4 ranks (75%). Over half (52%) had never deployed to OEF, OIF, or OND, or had deployed only once (27%).

Military characteristics for suicidal ideation cases from 2014 are described below and in Tables F-5 through F-7 and Figures F-4 and F-5. Differences relative to 2012 or 2013 are noted only when significant.

- **Component:** Most suicidal ideations occurred among Regular Army Soldiers (90%). Suicidal ideations in 2014 by activated Soldiers in the National Guard (6%) and U.S. Army Reserves (4%) decreased compared to 2012 (9% and 6%, respectively, X^2=8.3, p=0.016). Suicidal ideation rates by component were: Regular Army, 183.9 per 100,000; activated National Guard 83.8 per 100,000; activated Army Reserve, 59.2 per 100,000.

- **Rank:** Most suicidal ideation cases were from the E1–E4 ranks (66%). This was a significant decrease compared to 2012 (73%) with increases in the proportions of cases from the Noncommissioned Officer (E5–E9) and Junior Officer (O1–03) ranks (X^2=17.9, p=0.001; Figure 17). Suicidal ideation rates stratified by rank were: E1–E4, 286.4 per 100,000; E5–E9, 106.1 per 100,000; and O1–O3, 61.5 per 100,000. The small number of suicidal ideation cases among Warrant Officers and Senior Officers resulted in rates too unstable to report.

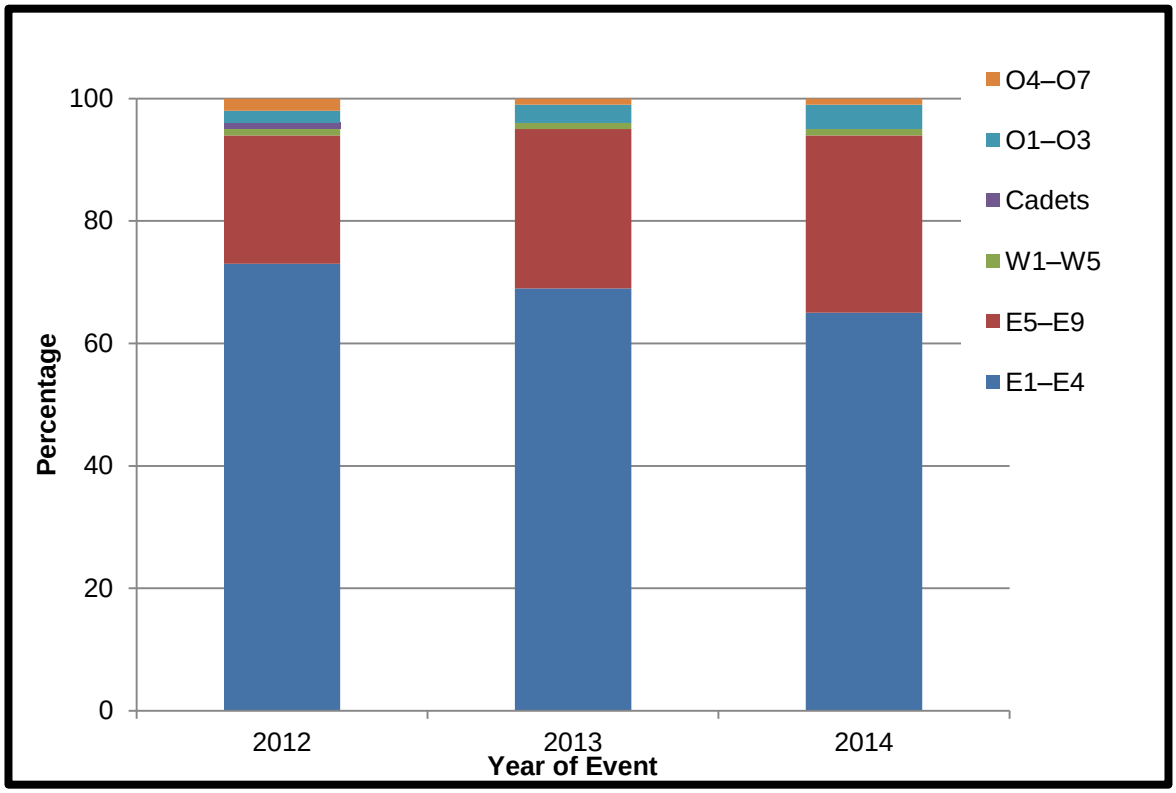

Figure 17. Rank Distribution, Suicidal Ideation Cases, U.S. Army, 2012–2014

- **Lifetime History of OEF/OIF/OND Deployment:** Most suicidal ideation cases had never deployed (48%) or had deployed only once (25%). However, the proportion of suicidal ideation cases with three or more deployments (14%) increased compared to 2012 (10%, X^2=9.8, p=0.044).

7.3 Event Characteristics

Of the suicidal ideations from 2007 through 2014, 88% occurred in the United States.

Event characteristics of suicidal ideation cases from 2014 are described below and in Table F-8.

- **Location:** The majority (81%) of suicidal ideations occurred in the United States, a significant decrease from 2012 (89%, X^2=110.4, p<0.001) and 2013 (88%, X^2=17.4, p<0.001).

7.4 Stressors

Among suicidal ideation cases from 2007 through 2014, 68% were reported to be affected by one or more stressors, which occurred within a year of the Soldier's suicidal ideation. Prevalent stressors included work stress (36%), relationship problems (36%), legal problems (26%), and ever being a victim of abuse (51%). In addition, 13% experienced the death and 3% the suicide of a family member or friend within a year before their ideation.

Stressors that affected suicidal ideation cases from 2014 are described below and in Table F-9 and Figure 18. All stressors occurred within a year of the Soldier's event unless otherwise noted. Differences relative to 2013 are noted only when significant.

- **Any Stressor:** Stressors were reported among 73% of suicidal ideation cases.

- **Relationship Stressors:** A little over a third (36%) of suicidal ideation cases had relationship problems.

- **Legal Stressors:** Some type of legal stressor was reported for 27% of suicidal ideation cases, a significant decrease compared to 2013 (29%, X^2=4.0, p=0.044). The most common legal stressor was Article 15 actions (13%), which was a significant decrease compared to 2013 (16%, X^2=3.7, p=0.053).

- **Health-Related Stressors:** Physical health problems were reported for 24% of ideation cases and 13% had experienced a Medical Evaluation Board. Family health problems affected 10% of the suicidal ideation cases. Moreover, 18% experienced the death and 5% the suicide of a family member or friend within a year of their ideation. Eighteen percent of Soldiers had ever had a family member or friend die by suicide, which was comparable to the proportion found among suicide attempts (22%).

- **Work and Financial Stressors:** Work-related stress was reported for 43%, a significant increase compared to 2013 (36%, X^2=4.0, p=0.047). Financial stress was reported for 10% of suicidal ideation cases.

- **Victims and Perpetrators of Abuse:** Few suicidal ideation cases were a victim of abuse within a year of their event (10%) and 5% were perpetrators of abuse. More than half (54%) of suicidal ideation cases had been the victim of abuse sometime in their lives, including almost a quarter (21%) who had experienced emotional abuse, 18% who were victims of physical abuse, and 15% who were victims of sexual abuse.

- **Suicide Prevention Training and Use of Army Counseling Services:** More than half (62%) of suicidal ideation cases had ever received suicide prevention training, 13% utilized the Army Substance Abuse Program (ASAP), and 5% used Family Advocacy Program services.

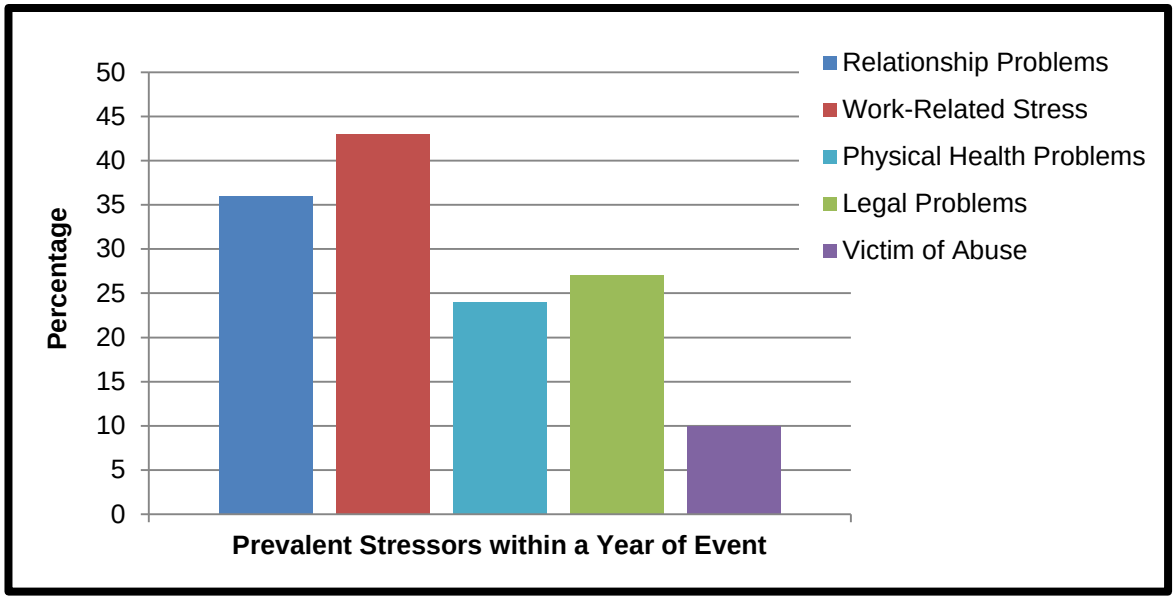

Figure 18. Prevalent Stressors, Suicidal Ideation Cases, U.S. Army, 2014

7.5 Behavioral Health Indicators

BH indicators from the PDHA, first implemented in 2004, the PDHRA, implemented in 2005, and the latest version of the PHA, implemented in 2009, are described here and in Tables F-10 and F-11. BH encounters and specific diagnoses, as well as incident diagnoses within the year before the suicidal event, are also described below and in Table F-12. Differences relative to 2012 or 2013 are noted only when significant.

7.5.1 Post-Deployment Health Assessment

Of the suicidal ideation cases from 2007 (the first year suicidal ideation data became available) through 2014 who had deployed and completed a PDHA in the year before the event (n=1040), 55% reported depression symptoms and 39% reported posttraumatic stress symptoms. Suicidal thoughts were reported by 5% of the suicidal ideation cases and providers referred 22% to BH care. There were, on average, 6 months between completion of the PDHA and the event.

BH indicators for suicidal ideation cases from 2014 with a PDHA within one year of the event (n=99) are described below and in Table F-10. On average, 7 months elapsed between the PDHA and the ideation.

- **Depression Symptoms:** Half (49%) reported depression symptoms.
- **Posttraumatic Stress:** A little less than one-third (30%) reported symptoms of posttraumatic stress, which was significantly less than in 2013 (48%, X^2=5.6 p=0.018).
- **Suicidal Thoughts:** Few (4%) reported suicidal thoughts.
- **Referrals:** Providers referred 20% to BH care, which was significantly less than in 2012 (30%, X^2=9.5, p=0.002) and 2013 (32%, X^2=6.6, p=0.010).

7.5.2 Post-Deployment Health Reassessment

Of the suicidal ideation cases from 2007 (the first year suicidal ideation data became available) through 2014 who had completed a PDHRA in the year before the event (n=984), 69% reported depression symptoms and 51% reported posttraumatic stress symptoms. Suicidal thoughts were reported by 7% and providers referred 17% to BH care. On average, 5 months elapsed between the PDHRA and the event.

BH indicators for suicidal ideation cases from 2014 with recent PDHRAs (n=124) are described below and in Table F-10. On average, 6 months elapsed between the PDHRA and the event.

- **Depression Symptoms:** Sixty-eight percent reported depression symptoms.
- **Posttraumatic Stress:** Half (50%) reported symptoms of posttraumatic stress.
- **Suicidal Thoughts:** Few (5%) reported suicidal thoughts.
- **Referrals:** Providers referred 17% to BH care.

7.5.3 Periodic Health Assessment

Among the suicidal ideation cases from 2008 (the first year the ABHIDE contains PHA data) through 2014 with a PHA in the 15 months before their ideation (n=2763), 8% screened positive for unhealthy drinking, and 2% screened positive for a probable alcohol disorder. Providers offered 8% a referral for their drinking behavior. Over a third (36%) received education about risks associated with alcohol consumption.

Alcohol screening results for 2014 suicidal ideation cases with a current PHA (n=768) are described below and in Table F-11. A PHA is considered current if it has been less than 15 months since the last PHA was completed.

- **Unhealthy Drinking:** Eight percent of 2014 cases screened positive for unhealthy drinking.
- **Probable Alcohol Disorder:** Few (<1%) screened positive for a probable alcohol disorder.
- **Referrals:** Providers offered 4% a referral for their drinking behavior.
- **Alcohol Education:** Over one-third (39%) of cases received education about risks related to drinking.

7.5.4 Behavioral Health Encounters

Of suicidal ideation cases from 2007 through 2014, 25% had an inpatient BH encounter during their military service and 81% had an outpatient BH encounter. In the 30 days before the event, 61% had a BH encounter.

BH encounters during military service among suicidal ideation cases from 2014 are described below and in Table F-12 (see Appendix C for encounter definitions).

- **Inpatient BH Encounters:** Over a quarter (27%) had an inpatient BH encounter during their military career.

- **Outpatient BH Encounters:** Most (85%) had an outpatient BH encounter since accession, which was significantly more than in 2012 (80%, X^2=7.5, p=0.006).

- **BH Encounter in Previous 30 Days:** In the 30 days preceding the event, 65% had a BH encounter, which was significantly more than in 2012 (59%, X^2=6.7, p=0.010).

7.5.5 Behavioral Health Diagnoses

Many (74%) of the suicidal ideation cases from 2007 through 2014 had received a BH diagnosis since accession and before the event. Over half of suicidal ideation cases (57%) were first diagnosed in the year before their event. Half (50%) had received more than one diagnosis. Nearly half (48%) had been diagnosed with a mood disorder, including major depression (23%) and other depressive disorders (41%). Bipolar disorder was diagnosed in 5% of cases. The prevalence of PTSD and other anxiety disorders was 17% and 26%, respectively. Adjustment disorder had the highest prevalence (56%) of any BH disorder among suicidal ideation cases. Substance use disorders were diagnosed in 21%. Diagnoses of personality disorders and psychoses were relatively uncommon (7% and 3%, respectively). An E-code documented previous suicide attempt or self-harm in 4% of suicidal ideation cases; 3% had a documented E-code in the year before their ideation. One-fifth of cases (20%) had a V-code for previous suicidal ideation; 17% of cases had a documented V-code in the year before their ideation.

BH diagnoses during military service among suicidal ideation cases from 2014 are described below and in Table F-12 and Figure 20 (see Appendix C for diagnosis definitions). Differences relative to 2012 or 2013 are noted only when significant.

- **Any BH Diagnosis:** Over three-fourths (77%) had received a BH diagnosis since accession and before the event, significantly more than in 2012 (73%, X^2=4.1, p=0.044). A little over half of 2014 cases (55%) were first diagnosed in the year before their event and 22% of cases had an initial BH diagnosis more than a year before their event (Figure 19).

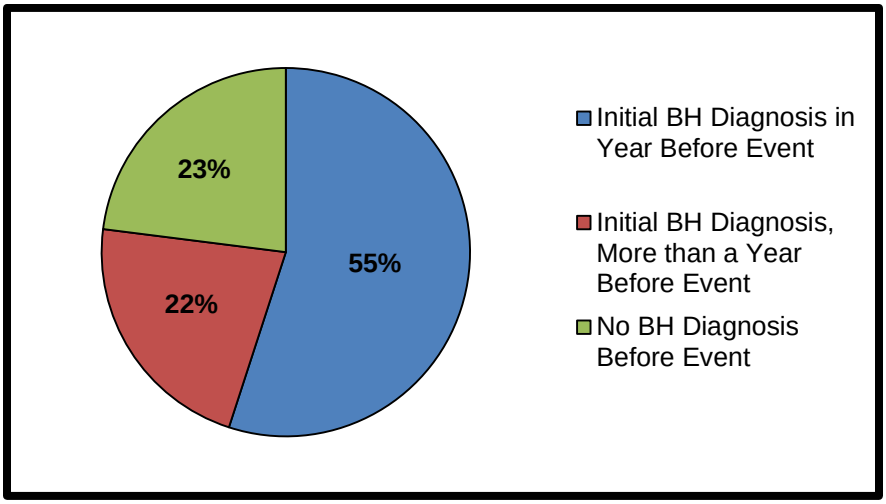

Figure 19. Time of Behavioral Health Diagnosis, Suicidal Ideation Cases, U.S. Army, 2014

- **More Than One BH Diagnosis:** More than half (57%) received more than one BH diagnosis over the course of their military career; 27% of suicidal ideation cases received more than one BH diagnosis in the year before their event.

- **Mood Disorders:** The proportion of cases diagnosed with a mood disorder increased from 2012 (46%) to 2014 (51%, X^2=5.3, p=0.022); 28% of cases were first diagnosed in the year before their event.

- **Major Depression and Other Depressive Disorders:** The prevalence of major depression and other depressive disorders was 27% and 44%, respectively; 16% of cases were first diagnosed with major depression in the year before their event; 24% of cases were first diagnosed with other depressive disorders in the year before their event.

- **Bipolar Disorder:** Few (4%) were diagnosed with bipolar disorder; 3% of suicidal ideation cases were first diagnosed in the year before their event.

- **Posttraumatic Stress Disorder:** Of the cases from 2014, 21% had received a PTSD diagnosis; 11% were first diagnosed in the year before their attempt.

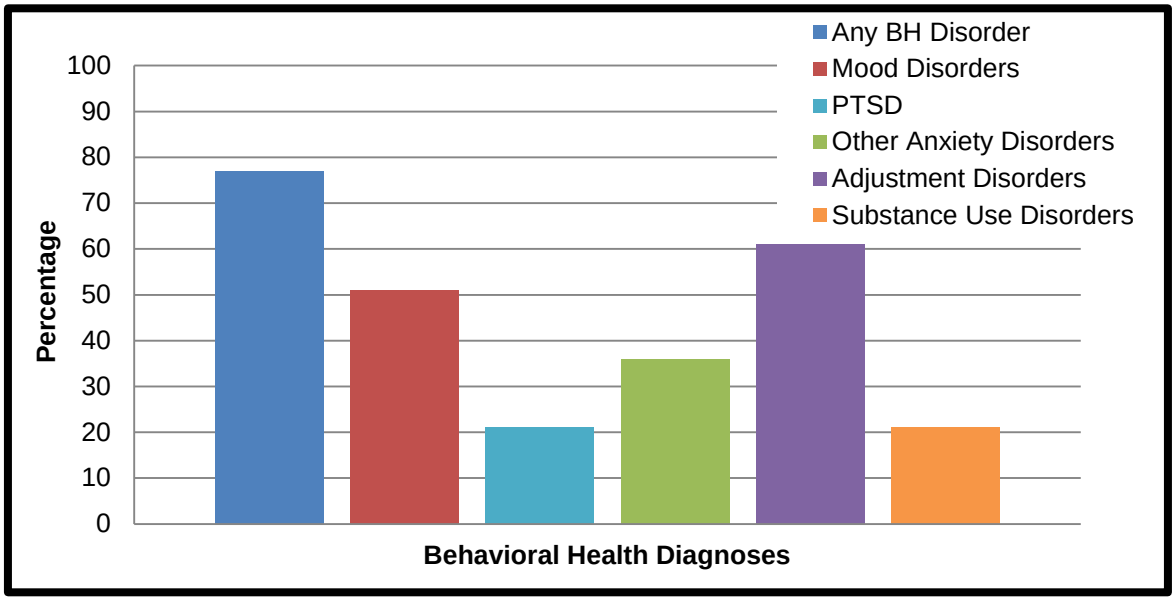

Figure 20. Behavioral Health Diagnoses, Suicidal Ideation Cases, U.S. Army, 2014

- **Other Anxiety Disorders:** The prevalence of anxiety disorders was 36%, significantly more than the proportion of cases in 2012 (30%, X^2=7.6, p=0.006) and 2013 (30%, X^2=7.4, p=0.006). The proportion of cases first diagnosed with an anxiety disorder in the year before their event increased from 2013 (14%) to 2014 (18%, X^2=5.3, p=0.021).

- **Adjustment Disorders:** The prevalence of adjustment disorder was 61% among 2014 cases; 27% of cases were first diagnosed in the year before their event.

- **Substance Use Disorders:** The prevalence of substance use disorders was 21%; 10% of cases were first diagnosed in the year before their ideation.
- **Personality Disorders and Psychoses:** Diagnoses of personality disorders and psychoses were relatively uncommon, 6% and 3%, respectively. The proportion of cases first diagnosed with personality disorders or psychoses in the year before their event were 4% and 3%, respectively.

- **Previous Suicide Attempt, Self-Harm, and Suicidal Ideation:** The prevalence of previous suicide attempt or self-harm, as documented by E-codes, was 4% in 2014. Previous suicidal ideation, as documented by V-codes, was 23%, a significant increase compared to 2013 (19%, X^2=4.9, p=0.028). Few (2%) cases from 2014 had a previous suicide attempt or self-harm documented by an E-code in the year before their ideation. Eighteen percent of cases had a V-code indicating a prior suicidal ideation in the year before their ideation.

7.6 Other Medical Indicators

Indicators of TBI, pain, and sleep problems are described here and in Tables F-13 through F-15. Polypharmacy is also described below and in Table F-16. Only significant differences are noted.

7.6.1 Traumatic Brain Injury

The prevalence of TBI diagnoses among suicidal ideation cases from 2007 through 2014 was 10%; 4% were first diagnosed in the year before the ideation. Over the course of their military career, 2% had an inpatient TBI encounter and 11% had an outpatient TBI encounter. In the year before their ideation, 7% had a TBI encounter, 2% in the 30 days before the suicidal event.

TBI among suicidal ideation cases from 2014 is described below and in Table F-13.

- **TBI Diagnoses:** Since accession, 14% of 2014 cases had been diagnosed with TBI (Figure 21); 4% were first diagnosed in the year preceding the ideation.

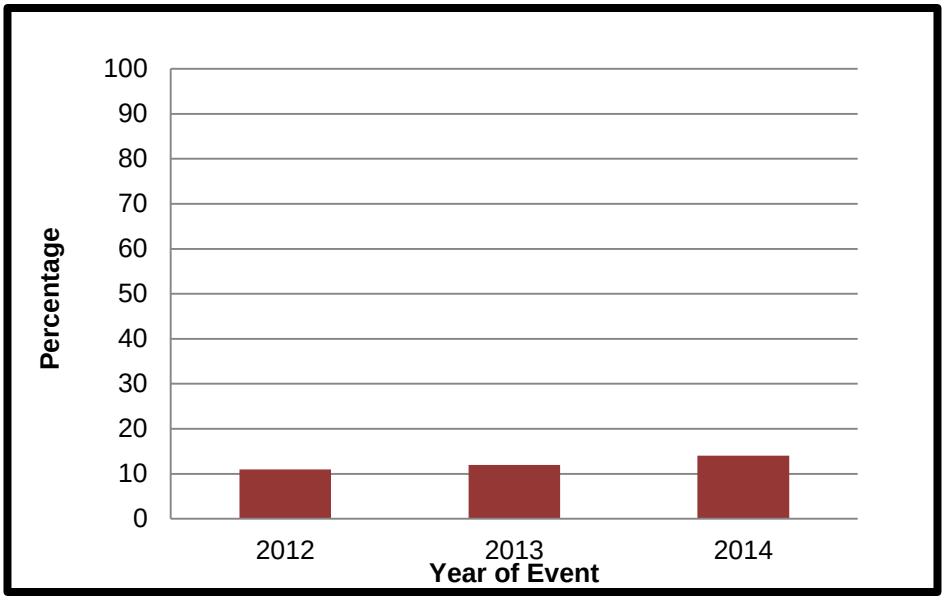

Figure 21. TBI Diagnosis, Ever, Suicidal Ideation Cases, U.S. Army, 2012–2014

- **TBI Encounters:** Few (2%) had ever had an inpatient TBI encounter; 15% had an outpatient TBI encounter. In the year before the suicidal ideation, 7% had a TBI encounter, with 3% having an encounter in the 30 days before the event.

7.6.2 Pain Indicators

Of suicidal ideation cases from 2007 through 2014, 49% had a pain encounter in the year preceding their event and 20% had a pain encounter in the 30 days before their event. The prevalence of pain diagnoses in the preceding year was 45%.

Pain indicators among 2014 suicidal ideation cases are described below and in Table F-14. Differences relative to 2012 or 2013 are noted only when significant.

- **Medical Encounters for Pain:** In the year preceding the event, 57% of 2014 suicidal ideation cases had a medical encounter for pain, which was a significant increase compared to 2012 (49%, X^2=11.0, p<0.001) and 2013 (52%, X^2=5.3, p=0.022). Twenty-three percent of cases had a medical encounter for pain within 30 days of their event.

- **Pain Diagnoses:** In the year before the event, 54% of suicidal ideation cases received a pain diagnosis, a significant increase compared to 2012 (44%, X^2=17.4, p<0.001) and 2013 (48%, X^2=6.2, p=0.013; Figure 22).

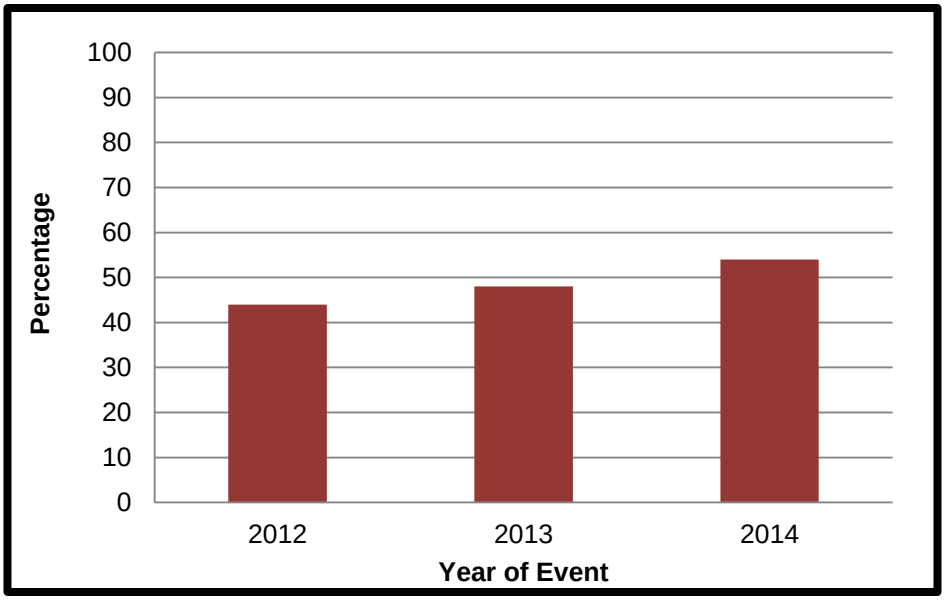

Figure 22. Pain Diagnosis in the Year Before the Event, Suicidal Ideation Cases, U.S. Army, 2012–2014

7.6.3 Sleep Problems

Of suicidal ideation cases from 2007 through 2014, 25% had a sleep encounter in the year preceding their event and 9% had a sleep encounter in the 30 days before their event. In the year before the event, 19% were diagnosed with a sleep disorder.

Sleep indicators among 2014 suicidal ideation cases are described below and in Table F-15. Differences relative to 2012 or 2013 are noted only when significant.

- **Medical Encounters for Sleep Problems:** In the year before the event, 36% of 2014 suicidal ideation cases had a medical encounter for a sleep problem, which was a significant increase compared to 2012 (29%, X^2=9.0, p=0.003) and 2013 (31%, X^2=5.3, p=0.021). Sleep encounters within the 30 days preceding the suicidal ideation increased in 2014 (14%) relative to 2012 (10%, X^2=6.7, p=0.010) and 2013 (11%, X^2=5.7, p=0.017).

- **Sleep Disorder Diagnoses:** In the year before the event, 28% of 2014 cases were diagnosed with a sleep disorder, a significant increase over 2012 (22%, X^2=9.3, p=0.002) and 2013 (24%, X^2=4.1, p=0.043; Figure 23).

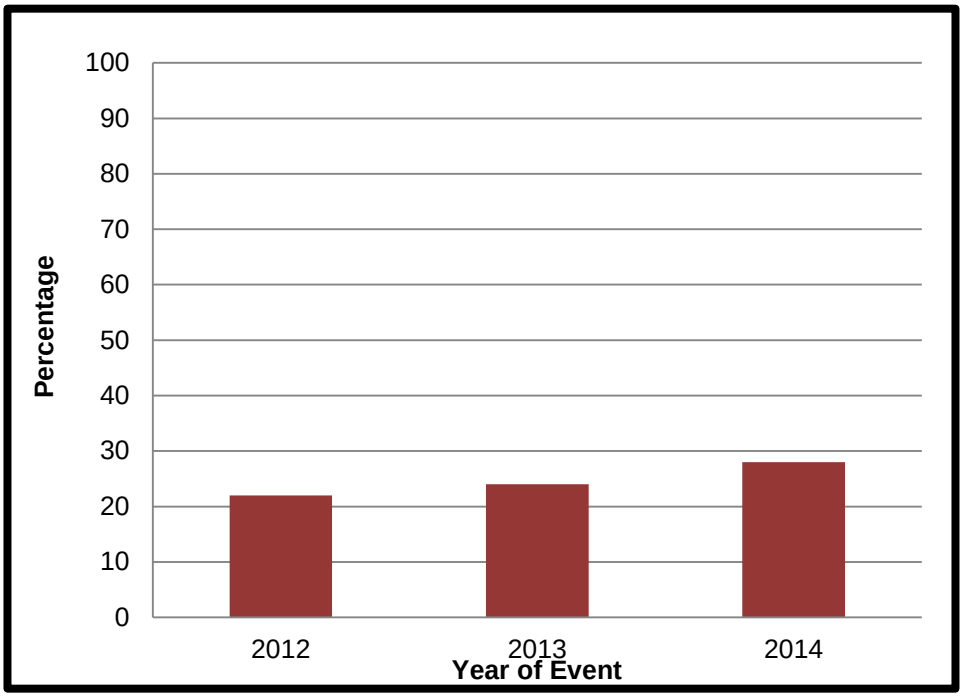

Figure 23. Sleep Disorder Diagnosis in the Year Before the Event, Suicidal Ideation Cases, U.S. Army, 2012–2014

7.6.4 Polypharmacy

At the time of the suicidal ideation, 13% of cases from 2007 through 2014 met criteria for polypharmacy. This included 9% who met criteria under a single definition of polypharmacy, and 4% who met criteria under more than one definition (see Figure D-6 for details).

Polypharmacy of suicidal ideation cases from 2014 is described below and in Table F-16.

- **Any Polypharmacy:** At the time of the event, 13% met criteria for polypharmacy (Figure 24).

- **Polypharmacy by Multiple Definitions:** Seventy percent of suicidal ideation cases with polypharmacy met criteria under a single definition; 29% of cases with polypharmacy met criteria for polypharmacy under two or more definitions.

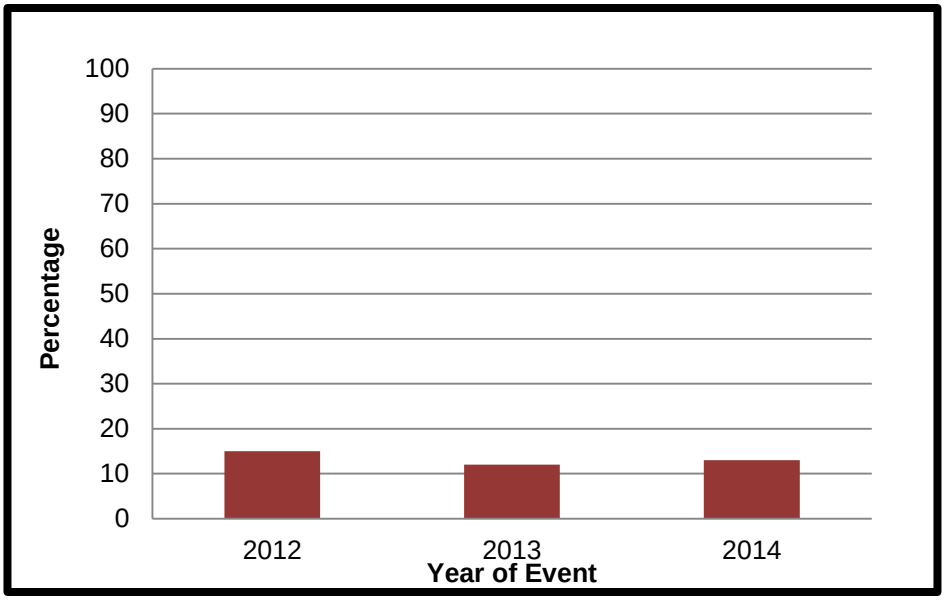

Figure 24. Polypharmacy at Time of Event, Suicidal Ideation Cases, U.S. Army, 2012–2014

7.7 Drug Testing and ASAP Screening

Of suicidal ideation cases from 2007 through 2014 with drug testing data (n=5773), 9% had a positive drug test some time prior to the event, excluding positive tests for drugs for which a Soldier had a prescription. Of these, 34% had more than one positive drug test, and 73% had a positive drug test in the year preceding their event. Positive tests were primarily for cannabis (58%) and cocaine (33%).

In the year before their ideation, 11% of cases were screened for intake into the ASAP program; 77% of these enrolled in the program.

Drug testing and ASAP screening of suicidal ideation cases from 2014 are described below and in Tables F-17 and F-18.

- **Positive Drug Tests:** Of 2014 cases with drug testing data (n=939), 7% had a positive drug test some time prior to the event, excluding positive tests for drugs for which the Soldier had a prescription. Of cases with positive tests, 32% had two or more positive drug tests, and 77% had a positive test in the year preceding the event.

- **Drugs with Positive Tests:** Positive tests were primarily for cannabis (40%) and cocaine (24%).

- **ASAP Screening & Enrollment:** In the year before their ideation, 13% were screened for intake into the ASAP program; 82% of these enrolled in the program.

8 Point of Contact

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Approved:

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Appendix A

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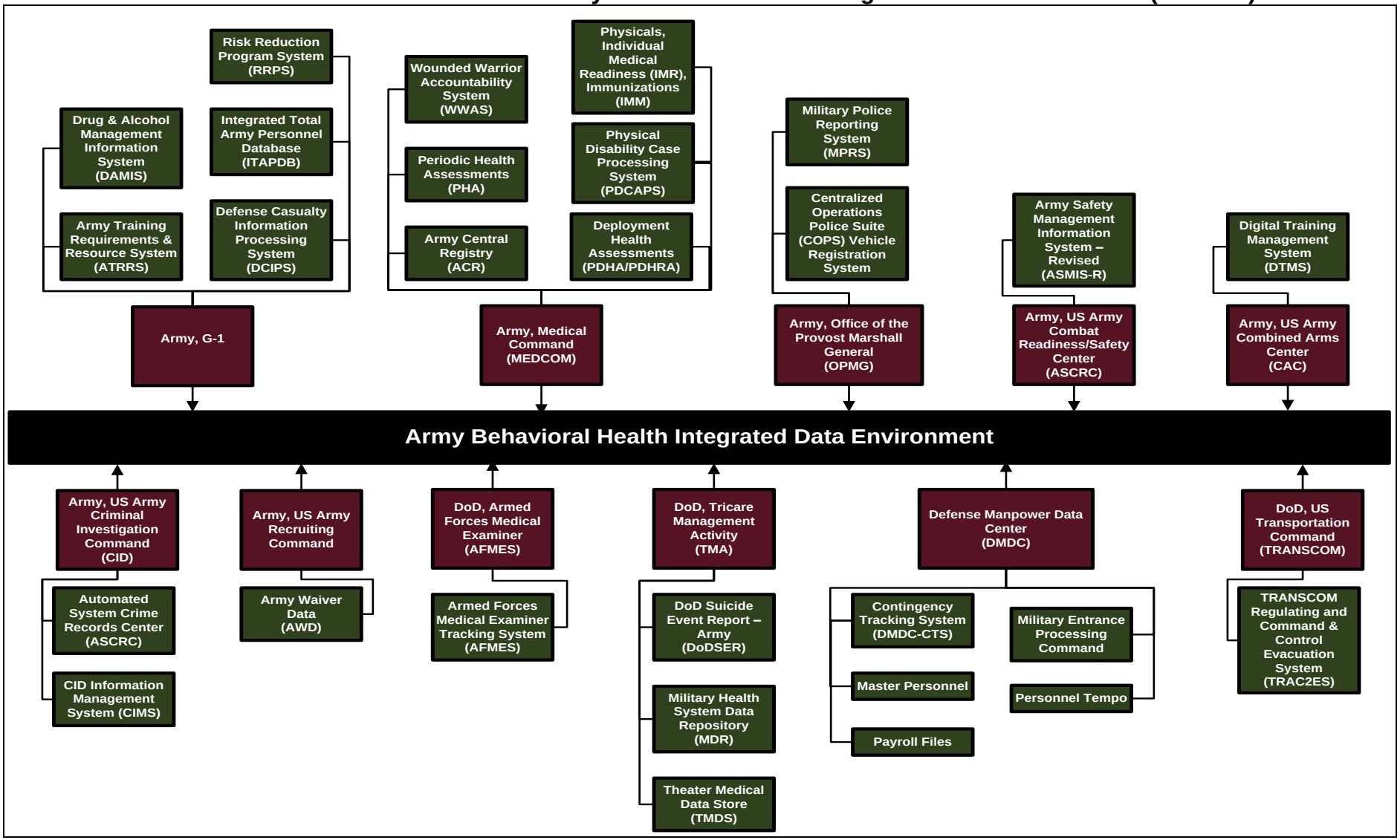
Appendix B

Administrative Data Sources in the Army Behavioral Health Integrated Data Environment (ABHIDE)



Appendix C

Definition of Behavioral Health Encounters and Diagnoses

Medical information in this report is based on data from the Military Health System, which includes claims from military treatment facilities and claims from purchased care that are submitted for payment by the government. Medical claims data use codes from the International Classification of Disease, 9th revision, Clinical Modification (ICD-9). V-codes may indicate encounters, but not diagnoses.

Medical Encounters. In inpatient data, an ICD-9 code for the condition in any diagnosis position Dx1–Dx8 is considered an encounter for that condition. In outpatient data, an ICD-9 code for the condition in any diagnosis position Dx1–Dx8 is considered an encounter for that condition.

Diagnoses. In inpatient data, an ICD-9 code for the condition in any diagnosis position Dx1–Dx8 is considered a diagnosis of that condition. In outpatient data, an ICD-9 code for the condition in the first diagnosis position (Dx1) is considered a diagnosis of the condition. However, ICD-9 codes in the second through fourth diagnosis positions (Dx2–Dx4) in outpatient data are also considered to indicate a diagnosis if a second code from the same group of ICD-9 codes occurs in Dx2–Dx4 within a year but not on the same day. For example, a Soldier with an ICD-9 code of 300.00 (anxiety state) in the third position would be considered to have a diagnosis of anxiety other than PTSD only if he or she had an ICD-9 code from the range (300.00–300.3) in the second through fourth position within a year but not on the same day. These definitions follow a Healthcare Effectiveness Data and Information Set (HEDIS) guideline from the National Committee from Quality Assurance.

C-1 Behavioral Health Encounters and Diagnoses

In this analysis, behavioral health (BH) ICD-9 codes include those in the range 290–319.99 (excluding tobacco use diagnoses), as well as certain codes related to sleep disorders, and V-codes related to counseling and maltreatment (see the Technical Notes document for a complete list).

- *Any mood disorder* includes major depression (296.2 or 296.3), dysthymia (300.4), depression not otherwise specified (311.0), bipolar disorder (296.0, 296.4, 296.8), or other mood disorders (296, 296.1, 296.9).
- *Posttraumatic stress disorder (PTSD)* is based on the ICD-9 code 309.81.
- *Other anxiety disorders* (i.e., anxiety disorders other than PTSD) are based on the ICD-9 codes 300.0, 300.10, 300.2, and 300.3.
- *Adjustment disorder* includes disorders in the 309 range, except 309.81 (PTSD).
- *Substance use disorders* include disorders related to alcohol and drug use (291, 292, 303, and 305.2–305.9) and exclude codes related to tobacco use (305.1–305.12).
- *Personality disorders* are indicated by ICD-9 codes 301–301.9.

- *Psychoses* are indicated by ICD-9 codes 290.8, 290.9, 295, 297, and 298.
- *Any BH disorder* includes only those disorders listed above.

C-2 Traumatic Brain Injury

In this analysis, ICD-9 codes indicating traumatic brain injury include those provided by the Defense and Veterans Brain Injury Center (DVBIC)[12]: 800–801.99, 803–804.99, 850–854.19.

C-3 Pain Encounters and Diagnoses

In this analysis, ICD-9 codes indicating pain include the following: 307.8–307.89, 337.2–337.29, 338–338.4 (omitting 338.2 and 338.28), 388.72, 723.1, 724–725.40, 729.5, 780.96, 784.0, and 786.5–786.52.

C-4 Sleep Problem Encounters and Diagnoses

In this analysis, ICD-9 codes indicating sleep problems include the following: 291.82, 292.85, 307.4–307.48, 327–327.8, 780.5–780.56, 780.58, and V694.

C-5 Polypharmacy

According to a 2013 policy memo,[10] polypharmacy occurs when a Soldier meets one or more of the following criteria:

- Prescribed four or more unique medications, including one opioid, during a month
- Prescribed four or more psychotropic drugs during a month
- Prescribed an opiate during three or more emergency room visits during a year

This publication reports the number and proportion of Soldiers who met one or more of these criteria.

Figure B-1 shows categories of polypharmacy, adapted from the Defense Health Agency's Pharmacoeconomic Center. Cases in Categories 5, 6, and 7 meet one criterion for polypharmacy. Cases in Categories 2, 3, and 4 meet two criteria, and cases in Category 1 meet all three criteria.

Appendix D

Suicide Cases Tables and Figures

Tables

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Table D-1. Demographic Characteristics, Suicide Cases,[a] U.S. Army, 2012 – 2014

Characteristic	Suicide Cases n (%) 2012 (n = 185)	2013 (n = 149)	2014 (n = 134)	Army Distribution[b] (%) 2014	Test for Significant Difference[c] (p-value) 2014 vs 2012	2014 vs 2013
SEX					0.707	0.452
Male	172 (93)	143 (96)	126 (94)	85		
Female	13 (7)	6 (4)	8 (6)	15		
AGE (YR)					0.734	0.400
17–24	56 (30)	54 (36)	39 (29)	29		
25–34	89 (48)	58 (39)	61 (46)	38		
35–64	40 (22)	37 (25)	34 (25)	33		
Mean	29 (±7.2)	29 (±8.3)	30 (±7.6)	NA	0.292[d]	0.537[d]
Mode	25	21	21	NA		
RACE-ETHNICITY					0.108	**0.042**
Non-Hispanic White	130 (70)	106 (71)	77 (57)	61		
Non-Hispanic Black	31 (17)	17 (11)	31 (23)	21		
Hispanic	11 (6)	14 (9)	16 (12)	12		
Non-Hispanic Asian/ Pacific Islander	10 (5)	8 (5)	9 (7)	5		
Non-Hispanic American Indian/Alaska Native	3 (2)	4 (3)	1 (<1)	1		
MARITAL STATUS					0.069	0.234
Single	55 (30)	50 (34)	35 (26)	NA		
Married	119 (64)	83 (56)	81 (60)	NA		
Divorced	11 (6)	14 (9)	18 (13)	NA		
Other[e]	0 (0)	2 (1)	0 (0)	NA		

Legend: NA – not available.

Notes: [a]Suicide cases in this table include those confirmed by Armed Forces Medical Examiner System or pending confirmation and thus may differ from counts published by G-1. [b]Data for proportions provided by the Defense Manpower Data Center. [c]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, p<0.05. [d]T-test of means. [e]Includes widowed and legally separated.

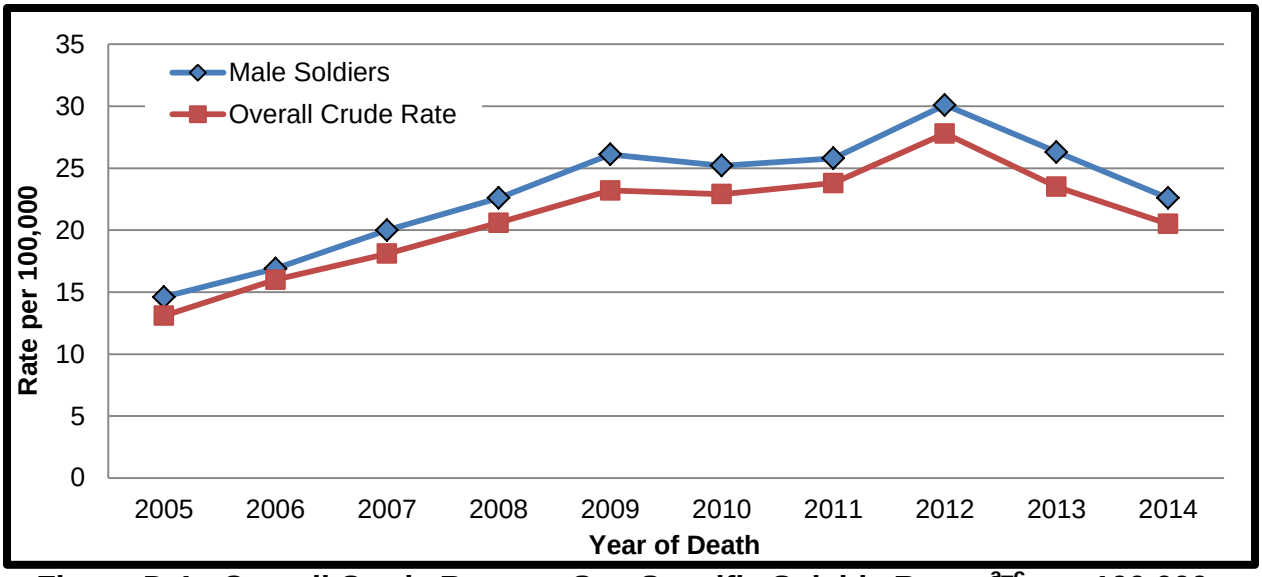

Figure D-1. Overall Crude Rate vs. Sex-Specific Suicide Rates,[a–c] per 100,000, U.S. Army Soldiers, 2005 – 2014

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2005 through 2014. [b] US Army population counts used to calculate rates were provided by the Defense Manpower Data Center. [c] Unstable rates (n <20) are not reported. Specifically, fewer than 20 female Soldiers died by suicide in any year, so rates could not be calculated for that group.

Table D-2. Overall Crude Rate and Sex-Specific Suicide Rates,[a–c] per 100,000, U.S. Army Soldiers, 2005 – 2014

	Overall		Sex			
			Male		Female	
	Rate	95% CI	Rate	95% CI	Rate	95% CI
Year of Death						
2005	13.1	10.4 – 15.9	14.6	11.5 – 17.8	--	--
2006	16.0	12.9 – 19.1	16.9	13.4 – 20.3	--	--
2007	18.1	14.9 – 21.4	20.0	16.3 – 23.8	--	--
2008	20.6	17.2 – 24.1	22.6	18.8 – 26.5	--	--
2009	23.2	19.6 – 26.7	26.1	22.1 – 30.2	--	--
2010	22.9	19.4 – 26.5	25.2	21.2 – 29.2	--	--
2011	23.8	20.2 – 27.4	25.8	21.8 – 29.9	--	--
2012	27.8	23.8 – 31.8	30.1	25.6 – 34.6	--	--
2013	23.5	19.7 – 27.2	26.3	22.0 – 30.6	--	--
2014	20.5	17.0 – 24.0	22.6	18.7 – 26.6	--	--

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2005 through 2014. [b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center. [c] Unstable rates (n <20) are not reported. Specifically, fewer than 20 female Soldiers died by suicide in any year, so rates could not be calculated for that group.

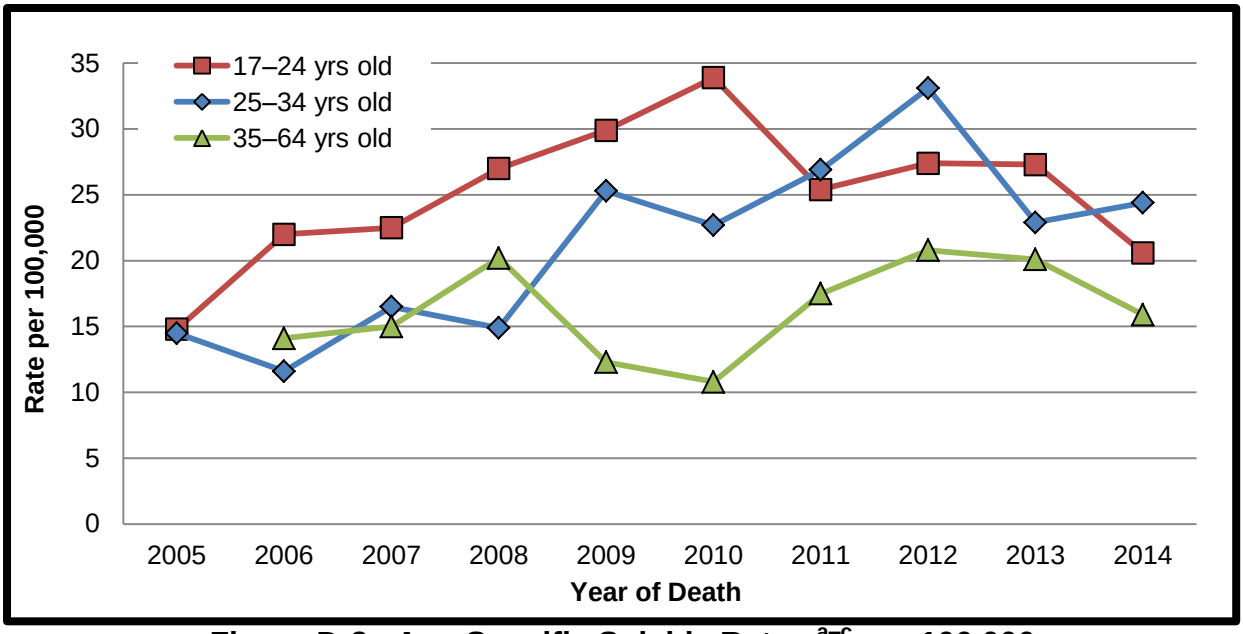

Figure D-2. Age-Specific Suicide Rates,[a–c] per 100,000, U.S. Army Soldiers, 2005 – 2014

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2005 through 2014. [b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center. [c] Unstable rates (n <20) are not reported. Specifically, in 2005 fewer than 20 Soldiers 35-64 years old died by suicide, so a rate could not be calculated for that group.

Table D-3. Age-Specific Suicide Rates,[a–c] per 100,000, U.S. Army Soldiers, 2005 – 2014

Age	17 – 24 yrs old		25 – 34 yrs old		35 – 64 yrs old	
	Rate	95% CI	Rate	95% CI	Rate	95% CI
Year of Death						
2005	14.8	9.9 – 19.7	14.5	9.7 – 19.4	--	--
2006	22.0	15.9 – 28.1	11.6	7.1 – 16.0	14.1	8.7 – 19.5
2007	22.5	16.3 – 28.6	16.5	11.2 – 21.7	15.0	9.4 – 20.5
2008	27.0	20.4 – 33.7	14.9	10.1 – 19.7	20.2	13.8 – 26.5
2009	29.9	23.0 – 36.8	25.3	19.3 –31.3	12.3	7.5 – 17.2
2010	33.9	26.4 – 41.4	22.7	17.1 – 28.3	10.8	6.3 – 15.4
2011	25.4	18.7 – 32.1	26.9	20.8 – 33.0	17.5	11.7 – 23.3
2012	27.4	20.2 – 34.5	33.1	26.2 – 40.0	20.8	14.4 – 27.3
2013	27.3	20.0 – 34.6	22.9	17.0 – 28.8	20.1	13.6 – 26.6
2014	20.6	14.1 – 27.0	24.4	18.3 – 30.5	15.9	10.6 – 21.3

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2005 through 2014. [b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center. [c] Unstable rates (n <20) are not reported. Specifically, in 2005 fewer than 20 Soldiers 35-64 years old died by suicide, so a rate could not be calculated for that group.

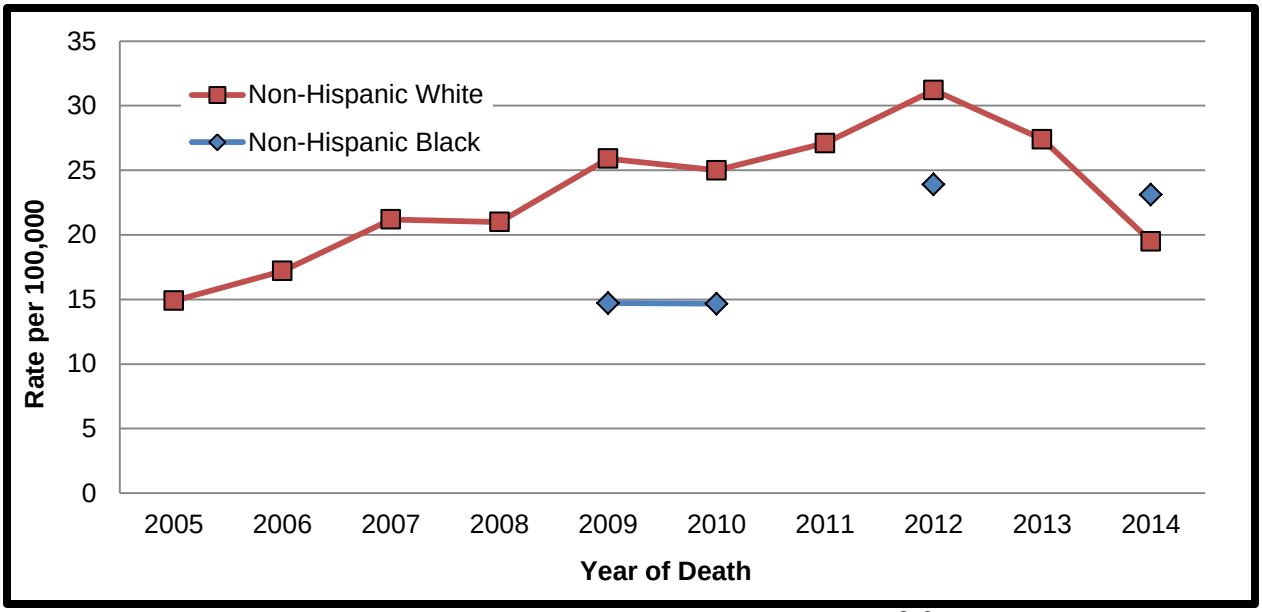

Figure D-3. Race-Ethnicity-Specific Suicide Rates,[a–c] per 100,000, U.S. Army Soldiers, 2005 – 2014

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2005 through 2014. [b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center. [c] Unstable rates (n <20) are not reported. Specifically, in most years, fewer than 20 Soldiers in any race-ethnicity other than non-Hispanic white died by suicide, so rates could not be calculated for those groups.

Table D-4. Race-Ethnicity-Specific Suicide Rates,[a–c] per 100,000, U.S. Army Soldiers, 2005 – 2014

Race-Ethnicity	Non-Hispanic White		Non-Hispanic Black		Hispanic		Non-Hispanic Native American/ Alaska Native		Non-Hispanic Asian/ Pacific Islander	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
Year of Death										
2005	14.9	11.2 – 18.6	--	--	--	--	--	--	--	--
2006	17.2	13.1 – 21.2	--	--	--	--	--	--	--	--
2007	21.2	16.8 – 25.7	--	--	--	--	--	--	--	--
2008	21.0	16.7 – 25.3	--	--	--	--	--	--	--	--
2009	25.9	21.2 – 30.5	14.7	8.3 – 21.2	--	--	--	--	--	--
2010	25.0	20.4 – 29.6	14.7	8.2 – 21.1	--	--	--	--	--	--
2011	27.1	22.3 – 31.9	--	--	--	--	--	--	--	--
2012	31.2	25.8 – 36.5	23.9	15.5 – 32.3	--	--	--	--	--	--
2013	27.4	22.2 – 32.7	--	--	--	--	--	--	--	--
2014	19.5	15.1 – 23.8	23.1	15.0 – 31.3	--	--	--	--	--	--

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2005 through 2014. [b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center. [c] Unstable rates (n <20) are not reported. Specifically, in most years, fewer than 20 Soldiers in any race-ethnicity other than non-Hispanic white died by suicide, so rates could not be calculated for those groups.

Table D-5. Military Characteristics, Suicide Cases,[a] U.S. Army, 2012 – 2014

Characteristic	Suicide Cases n (%) 2012 (n = 185)	2013 (n = 149)	2014 (n = 134)	Army Distribution[b] (%) 2014	Test for Significant Difference[c] (p-value) 2014 vs 2012	2014 vs 2013
COMPONENT					0.243	0.062
Regular Army	165 (89)	123 (83)	122 (91)	78		
Activated National Guard	17 (9)	20 (13)	7 (5)	12		
Activated Army Reserve	3 (2)	6 (4)	5 (4)	10		
RANK					0.650	0.676
E1–E4	86 (46)	71 (48)	54 (40)	36		
E5–E9	76 (41)	61 (41)	64 (48)	43		
W1–W5	6 (3)	1 (<1)	2 (1)	3		
Cadets	0 (0)	0 (0)	0 (0)	—		
O1–O3	12 (6)	10 (7)	10 (7)	9		
O4–O7	5 (3)	6 (4)	4 (3)	8		
NUMBER OF DEPLOYMENTS[d]					0.058	0.094
0	41 (22)	44 (30)	42 (31)	NA		
1	68 (37)	53 (36)	29 (22)	NA		
2	40 (22)	26 (17)	33 (25)	NA		
3	20 (11)	18 (12)	18 (13)	NA		
4+	16 (9)	8 (5)	12 (9)	NA		

Legend: E – Enlisted, NA – Not Available, O – Officer, OEF – Operation Enduring Freedom, OIF – Operation Iraqi Freedom, OND – Operation New Dawn, W – Warrant Officer.

Notes: [a]Suicide cases in this table include those confirmed by Armed Forces Medical Examiner System or pending confirmation and thus may differ from counts published by G-1. [b]Data for proportions provided by the Defense Manpower Data Center. [c]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [d]Refers to lifetime history of OEF, OIF, or OND deployment.

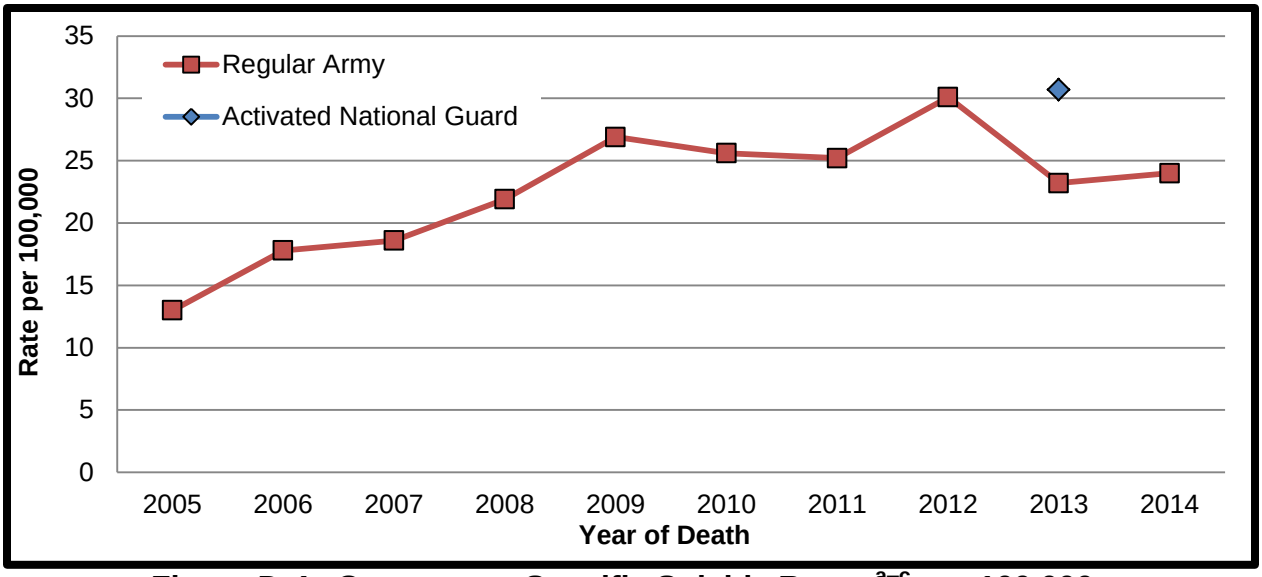

Figure D-4. Component-Specific Suicide Rates,[a–c] per 100,000, U.S. Army Soldiers, 2005 – 2014

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2005 through 2014. [b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center. [c] Unstable rates (n < 20) are not reported. Specifically, with the exception of 2013, fewer than 20 activated Guard or Reserve Soldiers died by suicide, so rates could not be calculated for those groups.

Table D-6. Component-Specific Suicide Rates,[a–c] per 100,000, U.S. Army Soldiers, 2005 – 2014

Component	Regular Army		Activated National Guard		Activated Army Reserve	
	Rate	95% CI	Rate	95% CI	Rate	95% CI
Year of death						
2005	13.0	9.8 – 16.2	--	--	--	--
2006	17.8	14.1 – 21.5	--	--	--	--
2007	18.6	14.9 – 22.4	--	--	--	--
2008	21.9	17.9 – 25.9	--	--	--	--
2009	26.9	22.5 – 31.2	--	--	--	--
2010	25.6	21.4 – 29.7	--	--	--	--
2011	25.2	21.1 – 29.4	--	--	--	--
2012	30.1	25.5 – 34.7	--	--	--	--
2013	23.2	19.1 – 27.3	30.7	17.2 – 44.1	--	--
2014	24.0	19.7 – 28.3	--	--	--	--

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2005 through 2014. [b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center. [c] Unstable rates ($n < 20$) are not reported. Specifically, with the exception of 2013, fewer than 20 activated Guard or Reserve Soldiers died by suicide, so rates could not be calculated for those groups.

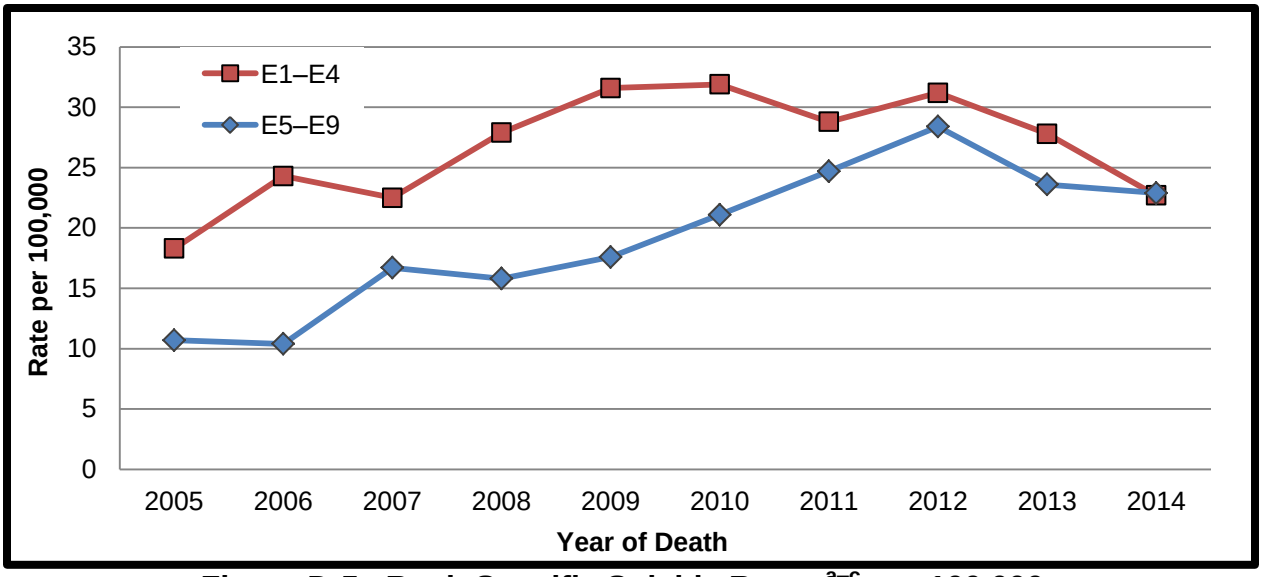

Figure D-5. Rank-Specific Suicide Rates,[a–c] per 100,000, U.S. Army Soldiers, 2005 – 2014

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2005 through 2014. [b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center. [c] Unstable rates (n < 20) are not reported. Specifically, fewer than 20 Officers or Warrant Officers died by suicide in any year, so rates could not be calculated for those groups.

Table D-7. Rank-Specific Suicide Rates,[a–c] per 100,000, U.S. Army Soldiers, 2005 – 2014

Rank	E1 – E4		E5 – E9		O1 – O3		O4 – O10		W1 – W5	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
YEAR OF DEATH										
2005	18.3	13.2 – 23.4	10.7	6.9 – 14.5	--	--	--	--	--	--
2006	24.3	18.3 – 30.3	10.4	6.5 – 14.2	--	--	--	--	--	--
2007	22.5	16.8 – 28.2	16.7	11.9 – 21.6	--	--	--	--	--	--
2008	27.9	21.8 – 34.0	15.8	11.1 – 20.5	--	--	--	--	--	--
2009	31.6	25.3 – 37.9	17.6	12.8 – 22.5	--	--	--	--	--	--
2010	31.9	25.6 – 38.3	21.1	15.7 – 26.4	--	--	--	--	--	--
2011	28.8	22.7 – 34.9	24.7	18.8 – 30.5	--	--	--	--	--	--
2012	31.2	24.6 – 37.8	28.4	22.1 – 34.8	--	--	--	--	--	--
2013	27.8	21.3 – 34.3	23.6	17.7 – 29.5	--	--	--	--	--	--
2014	22.7	16.6 – 28.7	22.9	17.3 – 28.5						

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2005 through 2014. [b] US Army population counts used to calculate rates were provided by the Defense Manpower Data Center. [c] Unstable rates (n < 20) are not reported. Specifically, fewer than 20 Officers or Warrant Officers died by suicide in any year, so rates could not be calculated for those groups.

Table D-8. Distribution of Regular Army Suicide Cases by Installation, U.S. Army, 2012 – 2014

Installation – n (%)	2012 (n = 165)		2013 (n = 123)		2014 (n = 122)	
Asia[b]	1	(0.6)	3	(2.4)	1	(0.8)
Europe[c]	5	(3.0)	4	(3.3)	4	(3.3)
Fort Belvoir	2	(1.2)	1	(0.8)	0	(0.0)
Fort Benning	4	(2.4)	4	(3.3)	5	(4.1)
Fort Bliss	6	(3.6)	7	(5.7)	12	(9.8)
Fort Bragg	17	(10.3)	16	(13.0)	13	(10.7)
Fort Campbell	14	(8.5)	6	(4.9)	13	(10.7)
Fort Carson	10	(6.1)	9	(7.3)	3	(2.5)
Fort Drum	5	(3.0)	6	(4.9)	5	(4.1)
Fort Gordon	0	(0.0)	1	(0.8)	1	(0.8)
Fort Hood	20	(12.1)	7	(5.7)	17	(13.9)
Fort Huachuca	1	(0.6)	0	(0.0)	0	(0.0)
Fort Irwin	1	(0.6)	1	(0.8)	0	(0.0)
Fort Jackson	3	(1.8)	2	(1.6)	0	(0.0)
Fort Knox	4	(2.4)	3	(2.4)	2	(1.6)
Fort Leavenworth	2	(1.2)	1	(0.8)	0	(0.0)
Fort Lee	3	(1.8)	0	(0.0)	2	(1.6)
Fort Leonard Wood	5	(3.0)	1	(0.8)	2	(1.6)
Fort Meade	3	(1.8)	2	(1.6)	1	(0.8)
Fort Polk	3	(1.8)	3	(2.4)	2	(1.6)
Fort Riley	4	(2.4)	3	(2.4)	6	(4.9)
Fort Rucker	1	(0.6)	0	(0.0)	1	(0.8)
Fort Sill	3	(1.8)	2	(1.6)	2	(1.6)
Fort Stewart	10	(6.1)	8	(6.5)	8	(6.6)
Fort Wainwright	1	(0.6)	1	(0.8)	2	(1.6)
Joint Base Elmendorf Richardson	1	(0.6)	2	(1.6)	0	(0.0)
Joint Base Langley Eustis	4	(2.4)	1	(0.8)	0	(0.0)

Table D-8. Distribution of Regular Army Suicide Cases by Installation, U.S. Army, 2012 – 2014 (continued)

Installation – n (%)	2012 (n = 165)		2013 (n = 123)		2014 (n = 122)	
Joint Base Lewis McChord	16	(9.7)	10	(8.1)	6	(4.9)
Joint Base Myer Henderson Hall	0	(0.0)	1	(0.8)	0	(0.0)
Joint Base San Antonio	1	(0.6)	4	(3.3)	2	(1.6)
Pentagon[d]	0	(0.0)	0	(0.0)	2	(1.6)
Presidio of Monterey	0	(0.0)	1	(0.8)	1	(0.8)
Redstone Arsenal	0	(0.0)	0	(0.0)	1	(0.8)
USAG Hawaii	7	(4.2)	5	(4.1)	3	(2.5)
USAREC	2	(1.2)	3	(2.4)	2	(1.6)
Walter Reed Army Medical Center	0	(0.0)	1	(0.8)	0	(0.0)
White Sands Missile Range	1	(0.6)	0	(0.0)	0	(0.0)
Other[e]	5	(3.0)	4	(3.3)	3	(2.5)

Legend: USAF – United States Air Force, USAG – United States Army Garrison, USAREC – United States Army Recruiting Command.

Notes: [a]Installation confirmation of suicide counts are for active-duty Regular Army personnel only (not activated National Guard or US Army Reserve). [b]Asia includes Japan and Korea. [c]Europe includes Germany, Italy, and Norway. [d]Pentagon refers to Army personnel at the Pentagon. [e]Includes Camp Atterbury, Federal Emergency Management Agency (FEMA) Incident Management Assistance Team, USAF Installations, Supreme Headquarters Allied Powers Europe (SHAPE), Kuwait, Ranger Training Dahlonega.

Table D-9. Location and Method,[a] Suicide Cases,[b] U.S. Army, 2012 – 2014

Characteristic	Suicides n (%) 2012 (n = 185)	2013 (n = 149)	2014 (n = 134)	Test for Significant Difference[c] (p-value) 2014 vs 2012	2014 vs 2013
LOCATION OF DEATH				0.125	0.825
USA	162 (88)	137 (92)	123 (92)		
In Theater	19 (10)	5 (3)	6 (4)		
Other[d]	4 (2)	7 (5)	5 (4)		
METHOD OF DEATH				**0.030**	0.255
Gunshot Wound	114 (62)	97 (65)	100 (75)		
Hanging/Asphyxiation	47 (25)	37 (25)	28 (21)		
Drug/Alcohol Overdose	12 (6)	3 (2)	2 (1)		
Other[e]	12 (6)	9 (6)	4 (3)		
Unknown	0 (0)	3 (2)	0 (0)		

Notes: [a]Location and method of death from Defense Casualty Information Processing System. [b]Suicide cases in this table include those confirmed by Armed Forces Medical Examiner System or pending confirmation and thus may differ from counts published by G-1. [c]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [d]Primarily Europe or Korea. [e]Includes carbon monoxide and other poisoning, jumping from heights or in front of vehicles, vehicle crashes, or drowning.

Table D-10. Additional Event Characteristics, Suicide Cases,[a] U.S. Army, 2012 – 2014

Characteristic	Suicide Cases n (%) 2012 (n = 161)	2013 (n = 125)	2014 (n = 130)	Test for Significant Difference[b,c] (p-value) 2014 vs 2012	2014 vs 2013
SUBSTANCE INVOLVEMENT					
Event Involved Alcohol	19 (12)	22 (18)	38 (29)	—	—
Event Involved Drugs	12 (7)	6 (5)	7 (5)	—	—
OTHER EVENT CHARACTERISTICS					
Communicated Prior to Event	46 (29)	29 (23)	33 (25)	—	—

Notes: [a]Suicide cases in this table include those confirmed by Armed Forces Medical Examiner System or pending confirmation and thus may differ from counts published by G-1. [b]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, p<0.05. [c]Comparison omitted because >10% unknown or missing.

Table D-11. Legal History and Stressors[a,b] from DoDSERs, Suicide Cases, U.S. Army, 2012 – 2014

Legal History and Stressors year before death, except as noted	Suicide Cases n (%) 2012 (n = 161)	2013 (n = 125)	2014 (n = 130)	Test for Significant Difference[c,d] (p-value) 2014 vs 2012	2014 vs 2013
LEGAL HISTORY					
Article 15	26 (16)	18 (14)	17 (13)	—	—
Civil Legal Problems	25 (16)	15 (12)	20 (15)	—	—
Administrative Separation[e]	19 (12)	10 (8)	9 (7)	—	—
AWOL	10 (6)	4 (3)	7 (5)	—	—
Nonselection[f]	4 (2)	6 (5)	7 (5)	—	—
Courts Martial	7 (4)	6 (5)	3 (2)	—	—
Any of the Above	53 (33)	36 (29)	39 (30)	—	—
MEDICAL BOARD[g]					
Yes	18 (11)	9 (7)	9 (7)	—	—
STRESSORS[h]					
Relationship Problem	86 (53)	63 (50)	69 (53)	—	—
Work Stress	47 (29)	28 (22)	32 (25)	—	—
Physical Health Problem	36 (22)	28 (22)	27 (21)	—	—
Victim of Abuse					
Previous Year	6 (4)	2 (2)	2 (2)	—	—
Ever	33 (20)	16 (13)	20 (15)	—	—
Emotional Abuse	14 (9)	8 (6)	5 (4)	—	—
Physical Abuse	13 (8)	6 (5)	6 (5)	—	—
Sexual Abuse	6 (4)	2 (2)	9 (7)	—	—
Spouse/Family/Friend Death	5 (3)	9 (7)	8 (6)	—	—
Perpetrator of Abuse	16 (10)	17 (14)	14 (11)	—	—
Financial Stress	20 (12)	5 (4)	11 (8)	—	—
Spouse/Family Health Problem	9 (6)	3 (2)	6 (5)	—	—
Spousal/Family/Friend Suicide					
Previous Year	1 (<1)	4 (3)	2 (2)	—	—
Ever	7 (4)	8 (6)	2 (2)	—	—
Any of the Above	112 (70)	89 (71)	95 (73)	—	—

Table D-11. Legal History and Stressors[a,b] from DoDSERs, Suicide Cases, U.S. Army, 2012 – 2014 (continued)

Legal History and Stressors year before death, except as noted	Suicide Cases n (%) 2012 (n = 161)	2013 (n = 125)	2014 (n = 130)	Test for Significant Difference[c,d] (p-value) 2014 vs 2012	2014 vs 2013
PROGRAM UTILIZATION					
Substance Abuse Services	20 (12)	11 (9)	12 (9)	—	0.878
Family Advocacy Program	28 (17)	9 (7)	13 (10)	—	—
Ever Received Suicide Prevention Training	44 (27)	45 (36)	64 (49)	—	—

Legend: AWOL – absent without leave, DoDSER – Department of Defense Suicide Event Report.

Notes: [a]Legal history and stressors within year before suicide, except as noted. [b]Suicide cases in this table include those confirmed by Armed Forces Medical Examiner System or pending confirmation and thus may differ from counts published by G-1. [c]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [d]Comparison omitted because >10% unknown or missing. [e]Considered for separation from the Army on the basis of conduct or inability to meet standards of duty performance and discipline. [f]Not selected for advanced schooling, promotion, or command. [g]Medical evaluation board to determine fitness for continued duty. [h]More than one stressor may apply.

Table D-12. Behavioral Health Indicators from PDHAs and PDHRAs,[a] Suicide Cases, U.S. Army, 2012 – 2014

Indicator	Suicide Cases with PDHAs or PDHRAs n (%) 2012	2013	2014	Test for Significant Difference[b] (p-value) 2014 vs 2012	2014 vs 2013
POST-DEPLOYMENT HEALTH ASSESSMENTS	(n = 37)	(n = 20)	(n = 19)		
Depression Symptoms[c]	13 (35)	4 (20)	9 (47)	0.418	0.070
Posttraumatic Stress Symptoms[d]	8 (22)	4 (20)	7 (37)	0.247	0.243
Suicidal Thoughts	0 (0)	0 (0)	1 (5)	0.359	0.487
Referred for BH Care	5 (14)	4 (20)	4 (21)	1.000	1.000
POST-DEPLOYMENT HEALTH REASSESSMENTS	(n = 42)	(n = 24)	(n = 18)		
Depression Symptoms[c]	21 (50)	7 (29)	5 (28)	0.111	0.922
Posttraumatic Stress Symptoms[d]	10 (24)	3 (13)	7 (39)	0.235	0.070
Suicidal Thoughts	1 (2)	0 (0)	0 (0)	1.000	—
Referred for BH Care	5 (12)	1 (4)	2 (11)	1.000	0.595

Legend: BH – behavioral health, PDHA – Post-Deployment Health Assessment, PDHRA – Post-Deployment Health Reassessment.

Notes: [a]Data from the most recent PDHA and PDHRA in the 12 months before the suicide. [b]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [c]Patient Health Questionnaire-2 (PHQ-2). [d]PTSD Checklist – Civilian (PCL-C).

Table D-13. Alcohol Misuse Indicators,[a,b] Suicide Cases, U.S. Army, 2012 – 2014

Indicator	Suicide Cases with PHAs n (%)			Test for Significant Difference[c] (p-value)	
	2012 (n = 143)	2013 (n = 124)	2014 (n = 119)	2014 vs 2012	2014 vs 2013
ALCOHOL MISUSE					
Unhealthy Drinking[b]	14 (10)	11 (9)	11 (9)	0.683	0.662
Probable Alcohol Disorder[d]	2 (1)	1 (<1)	0 (0)	0.498	1.000
Referred to ASAP	7 (5)	4 (3)	5 (4)	0.789	0.745
Received Alcohol-Related Education	54 (38)	51 (41)	39 (33)	0.401	0.178

Legend: ASAP – Army Substance Abuse Program, AUDIT-C – Alcohol Use Disorders Identification Test, PHA – Periodic Health Assessment.

Notes: [a]Based on AUDIT-C scores from the most recent PHA in the 15 months before the suicide. [b]The threshold for a positive screen indicating unhealthy drinking was raised one point to 5 or more for men and 4 or more for women. Therefore, results may differ from previous publications. [c]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [d]A high positive screen, indicating probable alcohol disorder, is 8 and above.

Table D-14. Behavioral Health Indicators, Suicide Cases,[a] U.S. Army, 2012 – 2014

Indicator	Suicide Cases n (%) 2012 (n = 185)	2013 (n = 149)	2014 (n = 134)	Test for Significant Difference[b] (p-value) 2014 vs 2012	2014 vs 2013
MEDICAL ENCOUNTERS[c]					
Inpatient Encounter Involving BH	47 (25)	27 (18)	30 (22)	0.534	0.372
Outpatient Encounter Involving BH	146 (79)	106 (71)	106 (79)	0.968	0.123
Encounter Involving BH in 30 Days Before Event	74 (40)	52 (35)	55 (41)	0.851	0.287
BH DIAGNOSIS[c]					
Any BH Diagnosis[d]					
Prevalence[e] Before Event	125 (68)	88 (59)	81 (60)	0.190	0.812
Incidence in Year Before Event	67 (36)	40 (27)	41 (31)	0.295	0.486
More Than One BH Diagnosis[f]					
Prevalence[e] Before Event	84 (45)	53 (36)	54 (40)	0.364	0.413
Incidence in Year Before Event	29 (16)	22 (15)	15 (11)	0.252	0.374
Any Mood Disorder					
Prevalence[e] Before Event	68 (37)	42 (28)	51 (38)	0.812	0.078
Incidence in Year Before Event	29 (16)	14 (9)	23 (17)	0.722	0.053
Major Depression					
Prevalence[e] Before Event	33 (18)	22 (15)	18 (13)	0.289	0.748
Incidence in Year Before Event	24 (13)	8 (5)	11 (8)	0.179	0.341
Other Depressive Disorders					
Prevalence[e] Before Event	57 (31)	35 (23)	45 (34)	0.600	0.060
Incidence in Year Before Event	23 (12)	12 (8)	23 (17)	0.235	**0.020**
Bipolar Disorder					
Prevalence[e] Before Event	7 (4)	7 (5)	6 (4)	0.757	0.930
Incidence in Year Before Event	3 (2)	1 (<1)	4 (3)	0.459	0.193
PTSD					
Prevalence[e] Before Event	28 (15)	15 (10)	21 (16)	0.896	0.158
Incidence in Year Before Event	13 (7)	10 (7)	7 (5)	0.512	0.599

Table D-14. Behavioral Health Indicators, Suicide Cases,[a] U.S. Army, 2012 – 2014 (continued)

Indicator	Suicide Cases n (%) 2012 (n = 185)	2013 (n = 149)	2014 (n = 134)	Test for Significant Difference[b] (p-value) 2014 vs 2012	2014 vs 2013
BH DIAGNOSIS[c] (CONTINUED)					
Other Anxiety Disorder[g]					
Prevalence[e] Before Event	46 (25)	33 (22)	29 (22)	0.503	0.918
Incidence in Year Before Event	21 (11)	15 (10)	9 (7)	0.162	0.312
Adjustment Disorder					
Prevalence[e] Before Event	82 (44)	58 (39)	53 (40)	0.395	0.914
Incidence in Year Before Event	30 (16)	22 (15)	18 (13)	0.493	0.748
Substance Use Disorder[h]					
Prevalence[e] Before Event	55 (30)	32 (21)	34 (25)	0.392	0.439
Incidence in Year Before Event	13 (7)	14 (9)	11 (8)	0.693	0.725
Personality Disorder[i]					
Prevalence[e] Before Event	10 (5)	7 (5)	7 (5)	0.943	0.839
Incidence in Year Before Event	6 (3)	3 (2)	3 (2)	0.739	1.000
Psychosis					
Prevalence[e] Before Event	3 (2)	2 (1)	1 (<1)	0.642	1.000
Incidence in Year Before Event	3 (2)	0 (0)	1 (<1)	0.642	0.474
Previous Suicide Attempt/Self Harm[j]					
Prevalence[e] Before Event	23 (12)	7 (5)	12 (9)	0.368	0.153
Incidence in Year Before Event	12 (6)	3 (2)	6 (4)	0.443	0.316
Previous Suicidal Ideation[k]					
Prevalence[e] Before Event	20 (11)	15 (10)	18 (13)	0.476	0.378
Incidence in Year Before Event	12 (6)	10 (7)	10 (7)	0.734	0.806

Legend: BH – behavioral health, ICD-9 – International Classification of Disease, version 9, Clinical Modification, PTSD – posttraumatic stress disorder.

Notes: [a]Suicide cases in this table include those confirmed by the Armed Forces Medical Examiner System or pending confirmation and thus may differ from counts published by G-1. [b]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, p<0.05. [c]May have more than one. [d]Any BH diagnosis includes diagnoses with one or more of the following: mood, PTSD, other anxiety disorders, adjustment disorder, substance use disorders, personality disorders, psychosis. [e]Ever diagnosed during time in service. [f]More than one BH diagnosis includes more than one of the aforementioned diagnoses. [g]Includes, for example, panic disorder, generalized anxiety disorder, or obsessive-compulsive disorder. [h]Includes drug or alcohol use disorders. [i]Includes, for example, borderline or antisocial personality disorders. [j]Based on ICD-9 E-codes for self-inflicted injuries. [k]Based on ICD-9 V-code for suicidal ideation.

Table D-15. Traumatic Brain Injuries,[a] Suicide Cases,[b] U.S. Army, 2012 – 2014

Indicator	Suicide Cases n (%) 2012 (n = 185)	2013 (n = 149)	2014 (n = 134)	Test for Significant Difference[c] (p-value) 2014 vs 2012	2014 vs 2013
MEDICAL ENCOUNTERS[d]					
Inpatient Encounter Involving TBI	10 (5)	11 (7)	4 (3)	0.298	0.099
Outpatient Encounter Involving TBI	29 (16)	21 (14)	25 (19)	0.483	0.299
Encounter Involving TBI in Year Before Event	20 (11)	16 (11)	12 (9)	0.586	0.616
Encounter Involving TBI in 30 Days Before Event	10 (5)	12 (8)	3 (2)	0.158	**0.029**
TBI DIAGNOSES[d]					
Any TBI Diagnosis	31 (17)	27 (18)	22 (16)	0.936	0.705
First TBI Diagnosis in Year Before Event	14 (8)	15 (10)	8 (6)	0.578	0.208

Legend: ICD-9 – International Classification of Disease, 9th revision, Clinical Modification, TBI – traumatic brain injury.

Notes: [a]Based on ICD-9 codes for traumatic brain injuries provided by the Defense and Veterans Brain Injury Center (DVBIC): 800–801.99, 803–804.99, 850–854.19. [b]Suicide cases in this table include those confirmed by the Armed Forces Medical Examiner System or pending confirmation and thus may differ from counts published by G-1. [c]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [d]May have more than one.

Table D-16. Pain,[a] Suicide Cases,[b] U.S. Army, 2012 – 2014

Indicator	Suicide Cases n (%) 2012 (n = 185)	2013 (n = 149)	2014 (n = 134)	Test for Significant Difference[c] (p-value) 2014 vs 2012	2014 vs 2013
MEDICAL ENCOUNTERS					
Encounter for Pain in Year Before Event	84 (45)	63 (42)	56 (42)	0.521	0.933
Encounter for Pain in 30 Days Before Event	24 (13)	15 (10)	7 (5)	**0.021**	0.129
DIAGNOSES					
Pain Diagnosis in Year Before Event	79 (43)	61 (41)	50 (37)	0.333	0.533

Legend: ICD-9 – ICD-9 – International Classification of Diseases, 9th revision, Clinical Modification.

Notes: [a] ICD-9 codes indicating pain include 307.8–307.89, 337.2–337.29, 338–338.4 (omitting 338.2 and 338.28), 724–725.40, 786.5–786.52, 388.72, 729.5, 723.1, 780.96, and 784.0. [b] Suicide cases in this table include those confirmed by the Armed Forces Medical Examiner System or pending confirmation and thus may differ from counts published by G-1. [c] Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$.

Table D-17. Sleep Problems,[a] Suicide Cases,[b] U.S. Army, 2012 – 2014

Indicator	Suicide Cases n (%)			Test for Significant Difference[c] (p-value)	
	2012 (n = 185)	2013 (n = 145)	2014 (n = 134)	2014 vs 2012	2014 vs 2013
MEDICAL ENCOUNTERS					
Encounter for Sleep Problem in Year Before Event	48 (26)	38 (26)	37 (28)	0.740	0.688
Encounter for Sleep Problem in 30 Days Before Event	13 (7)	13 (9)	12 (9)	0.527	0.946
DIAGNOSES					
Sleep Problem Diagnosis in Year Before Event	37 (20)	24 (16)	32 (24)	0.406	0.101

Legend: ICD-9 – ICD-9 – International Classification of Diseases, 9th revision, Clinical Modification.

Notes: [a]ICD-9 codes indicating sleep problems include 307.4–307.48, 327–327.8, 780.5–780.56, 291.82, 292.85, 780.58, and V694. [b]Suicide cases in this table include those confirmed by the Armed Forces Medical Examiner System or pending confirmation and thus may differ from counts published by G-1. [c]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, p<0.05.

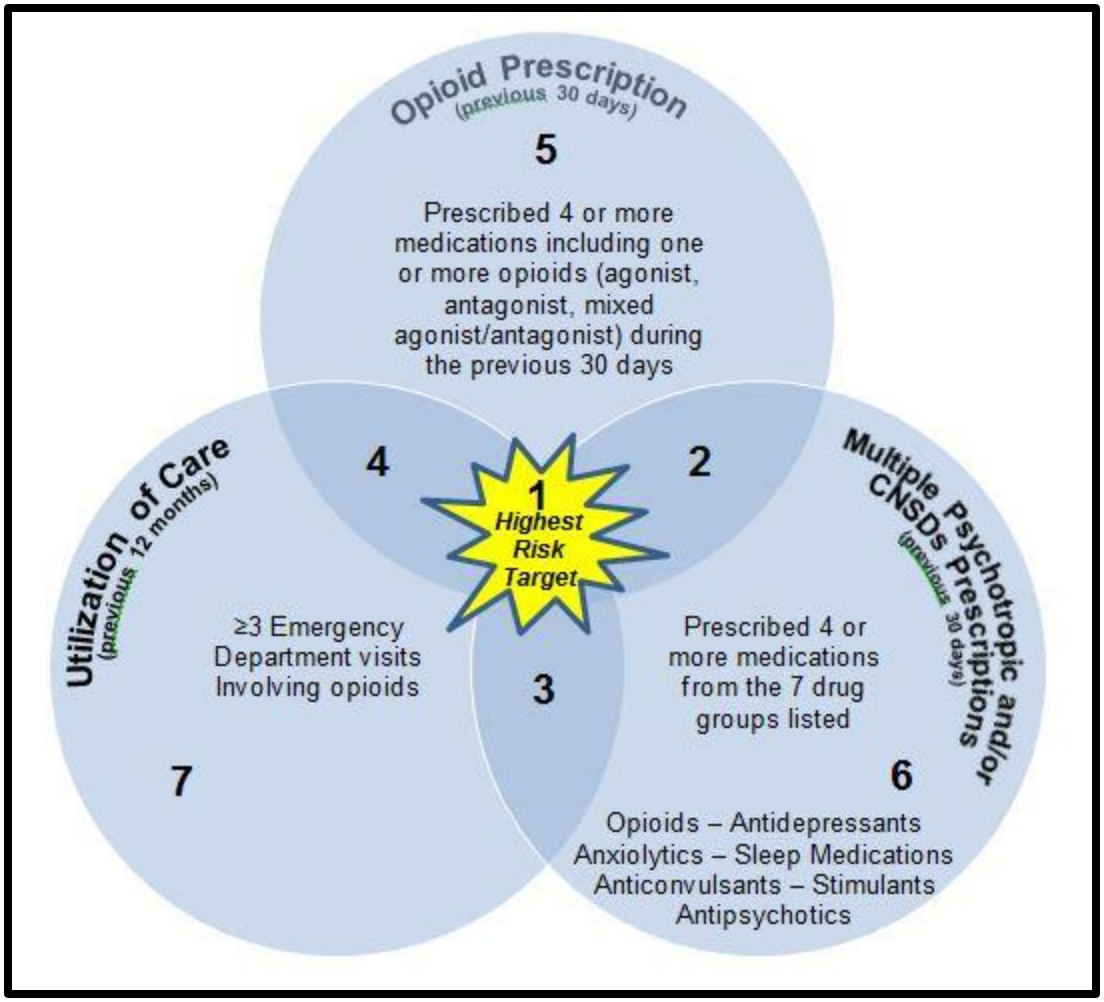

Figure D-6. Polypharmacy Categories

Notes: Polypharmacy definition from Office of the Surgeon General (OTSG) Policy 13-032. Opioid Prescription is defined as "Prescriptions for four or more of any type of medication, including one or more opioid within the previous 30 days." Multiple Psychotropic Prescriptions is defined as "Prescriptions for four or more medications from the seven categories of psychotropics and Central Nervous System Depressants (opioid, stimulant, anxiolytic, antidepressant, antipsychotic, anticonvulsant, or sleep medication) within the previous 30 days." Utilization of Care is defined as "Three or more Emergency Department visits in the past year in which an opioid was prescribed at each visit." Category definitions, drug categorizations, and figure (adapted) are from Defense Health Agency's Pharmacoeconomic Center. Cases in Categories 5, 6, and 7 meet one criterion for polypharmacy. Cases in Categories 2, 3, and 4 meet two criteria, and cases in Category 1 meet all three criteria.

Table D-18. Polypharmacy, Suicide Cases,[a] U.S. Army, 2012 – 2014

Category	Suicide Cases n (%) 2012 (n = 185)	2013 (n = 149)	2014 (n = 134)	Test for Significant Difference[b] (p-value) 2014 vs 2012	2014 vs 2013
POLYPHARMACY					
Any Polypharmacy[c]	21 (11)	7 (5)	11 (8)	0.357	0.227
Categories of Polypharmacy[d]					
1. Met all criteria[e]	3 (14)	0 (0)	0 (0)		
2. Psychotropics & opioid[f]	3 (14)	0 (0)	2 (18)		
3. Psychotropics & ER visits[g]	0 (0)	0 (0)	0 (0)		
4. Opioid & ER visits[h]	1 (5)	0 (0)	0 (0)		
5. At least one opioid prescription[i]	7 (33)	2 (29)	2 (18)		
6. Multiple psychotropic prescriptions[j]	5 (24)	4 (57)	7 (64)		
7. 3+ ER visits with opioids prescribed[k]	2 (10)	1 (14)	0 (0)		

Legend: OTSG – Office of the Surgeon General; ER – Emergency Room.

Notes: [a]Suicide cases in this table include those confirmed by the Armed Forces Medical Examiner System or pending confirmation and thus may differ from counts published by G-1. [b]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [c]Met at least one criterion for polypharmacy, as defined by OTSG Policy 13-032 definition, at the time of the event. [d]Proportion out of cases with any polypharmacy. [e]Met all three polypharmacy criteria (categories 5, 6, and 7 in the table above). [f]Had 4 or more prescriptions for psychotropic drugs in the 30 days prior to the event and had 4 or more prescriptions in the 30 days prior to the event, at least one of which was an opioid. [g]Had 4 or more prescriptions for psychotropic drugs in the 30 days prior to the event and had at least 3 ER visits in the year preceding the event where an opioid was prescribed. [h]Had at least 3 ER visits in the year preceding the event where an opioid was prescribed and had 4 or more prescriptions in the 30 days prior to the event, at least one of which was an opioid. [i]Had 4 or more prescriptions in the 30 days prior to the event, at least one of which was an opioid. [j]Had 4 or more prescriptions for psychotropic drugs in the 30 days prior to the event. [k]Had at least 3 ER visits in the year preceding the event where an opioid was prescribed.

Table D-19. Drug Testing History,[a] Suicide Cases,[b] U.S. Army, 2012 – 2014

Measure	Suicide Cases n (%) 2012 (n = 181)	2013 (n = 149)	2014 (n = 131)	Test for Significant Difference[c] (p-value) 2014 vs 2012	2014 vs 2013
DRUG TEST HISTORY					
Positive Drug Test	12 (7)	6 (4)	5 (4)	0.280	0.928
More than One Positive Drug Test[d]	3 (25)	1 (17)	1 (20)	1.000	1.000
Positive Drug Test in Year Before Event[d]	7 (58)	2 (33)	3 (60)	1.000	0.567
Amphetamines[d]	4 (33)	0 (0)	0 (0)	——[e]	——[e]
Cannabis[d]	2 (17)	3 (50)	2 (40)	——[e]	——[e]
Cocaine[d]	6 (50)	1 (17)	2 (40)	——[e]	——[e]
Oxycodone/Oxymorphone[d]	1 (8)	2 (33)	0 (0)	——[e]	——[e]
Opiates[d]	4 (33)	0 (0)	1 (20)	——[e]	——[e]
Heroin[d]	2 (17)	0 (0)	0 (0)	——[e]	——[e]
Steroids[d]	0 (0)	0 (0)	0 (0)	——[e]	——[e]
Barbiturates[d]	0 (0)	0 (0)	0 (0)	——[e]	——[e]

Notes: [a]Drug testing history is available only for cases who have a record of a drug test in the Drug and Alcohol Management Information System (DAMIS). [b]Suicide cases in this table include those confirmed by the Armed Forces Medical Examiner System or pending confirmation and thus may differ from counts published by G-1. [c]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [d]Proportion out of cases with any positive drug test. [e]Statistical test omitted because of the small counts for each drug.

Table D-20. ASAP Intake History,[a,b] Suicide Cases,[c] U.S. Army, 2012 – 2014

Measure	Suicide Cases n (%)			Test for Significant Difference[d] (p-value)	
	2012 (n = 185)	2013 (n = 149)	2014 (n = 134)	2014 vs 2012	2014 vs 2013
ASAP INTAKE SCREENING					
Screened for Intake	26 (14)	8 (5)	14 (10)	0.337	0.111
Enrolled for Treatment[e]	19 (73)	5 (63)	9 (64)	0.720	1.000

Legend: ASAP – Army Substance Abuse Program.

Notes: [a]Data from the Drug and Alcohol Management Information System (DAMIS). [b]ASAP screening and enrollment in the year before the event. [c]Suicide cases in this table include those confirmed by the Armed Forces Medical Examiner System or pending confirmation and thus may differ from counts published by G-1. [d]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [e]Proportion out of cases screened for intake.

Appendix E

Suicide Attempt Cases Tables and Figures

Tables

Figures

Table E-1. Demographic Characteristics, Suicide Attempt Cases,[a] U.S. Army, 2012 – 2014

Characteristic	Suicide Attempt Cases n (%) 2012 (n = 352)	2013 (n = 474)	2014 (n = 504)	Army Distribution[b] (%) 2014	Test for Significant Difference[c] (p-value) 2014 vs 2012	2014 vs 2013
SEX					0.595	0.768
Male	273 (78)	364 (77)	383 (76)	85		
Female	79 (22)	110 (23)	121 (24)	15		
AGE (YR)					0.682	0.972
17–24	177 (50)	239 (50)	258 (51)	29		
25–34	135 (38)	173 (37)	181 (36)	38		
35–64	40 (11)	62 (13)	65 (13)	33		
Mean	26 (±6.6)	26 (±7.0)	26 (±6.7)	NA	0.764[d]	0.634[d]
Mode	21	22	21	NA		
RACE-ETHNICITY					0.295	**0.008**
Non-Hispanic White	211 (60)	307 (65)	275 (55)	61		
Non-Hispanic Black	73 (21)	75 (16)	109 (22)	21		
Hispanic	45 (13)	60 (13)	90 (18)	12		
Non-Hispanic Asian/ Pacific Islander	16 (5)	22 (5)	24 (5)	5		
Non-Hispanic American Indian/Alaska Native	6 (2)	9 (2)	6 (1)	1		
Missing	1 (<1)	1 (<1)	1 (<1)			
MARITAL STATUS					0.570	0.346
Single	151 (43)	204 (43)	239 (47)	NA		
Married	175 (50)	229 (48)	231 (46)	NA		
Divorced	23 (7)	37 (8)	28 (6)	NA		
Other[e]	3 (<1)	4 (<1)	5 (1)	NA		
Unknown	0 (0)	0 (0)	1 (<1)			

Legend: DoDSER – Department of Defense Suicide Event Report, NA – Not Available.

Notes: [a]Suicide attempt cases are from DoDSERs, which are available only for cases serious enough to warrant hospitalization or evacuation. [b]Data for proportions were provided by the Defense Manpower Data Center. [c]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [d]T test of means. [e]Includes widowed and legally separated.

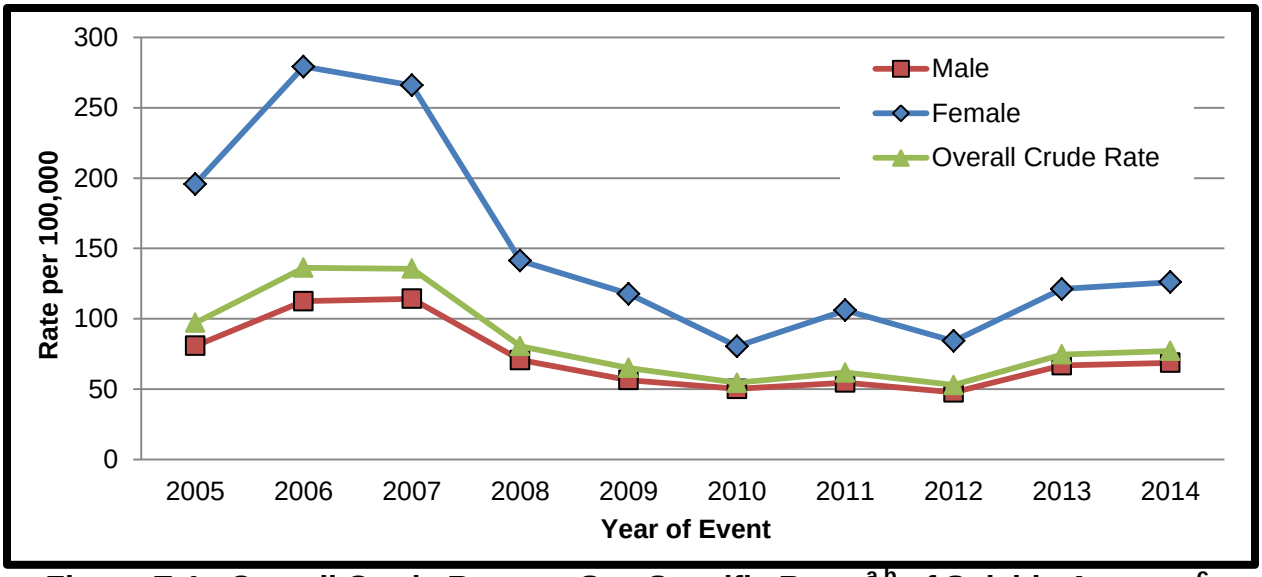

Figure E-1. Overall Crude Rate vs. Sex-Specific Rates[a,b] of Suicide Attempt,[c] per 100,000, U.S. Army Soldiers, 2005 – 2014

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2005 through 2014. [b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center. [c] DoDSERs from 2005–2006 with missing event type were resolved as suicide attempt cases if they could not be confirmed as suicide cases.

Table E-2. Overall Crude Rate vs. Sex-Specific Rates[a,b] of Suicide Attempt,[c] per 100,000, U.S. Army Soldiers, 2005 – 2014

	Sex					
	Overall		Male		Female	
	Rate	95% CI	Rate	95% CI	Rate	95% CI
YEAR OF ATTEMPT						
2005	97.2	89.6 – 104.7	80.8	73.4 – 88.2	195.7	167.5 – 223.9
2006	136.3	127.2 – 145.3	112.5	103.6 – 121.4	279.2	244.9 – 313.6
2007	135.6	126.6 – 144.6	114.2	105.3 – 123.1	265.9	232.4 – 299.3
2008	80.6	73.9 – 87.4	70.7	63.9 – 77.5	141.3	117.4 – 165.1
2009	65.1	59.2 – 71.0	56.5	50.5 – 62.4	117.7	96.5 – 139.0
2010	54.5	49.0 – 59.9	50.2	44.6 – 55.9	80.5	62.8 – 98.1
2011	61.8	56.0 – 67.7	54.6	48.7 – 60.5	106.0	85.7 – 126.4
2012	52.9	47.4 – 58.4	47.7	42.1 – 53.4	84.2	65.6 – 102.8
2013	74.7	67.9 – 81.4	66.9	60.0 – 73.8	121.1	98.4 – 143.7
2014	77.2	70.4 – 83.9	68.7	61.9 – 75.6	126.1	103.7 – 148.6

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2005 through 2014. [b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center. [c] DoDSERs from 2005–2006 with missing event type were resolved as suicide attempt cases if they could not be confirmed as suicide cases.

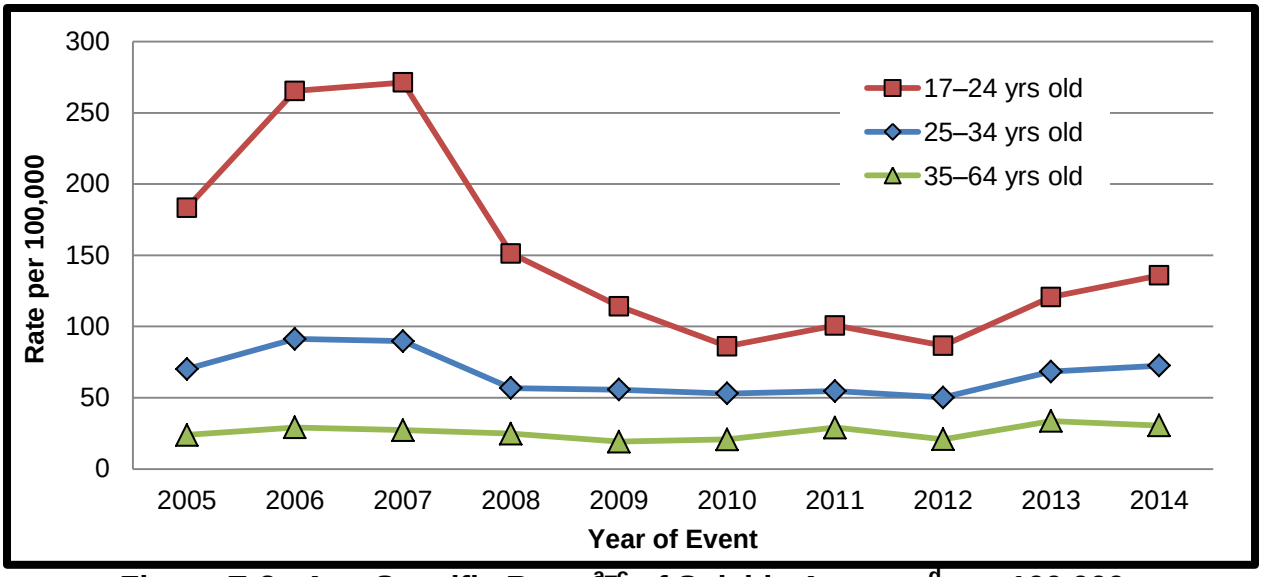

Figure E-2. Age-Specific Rates[a–c] of Suicide Attempt,[d] per 100,000, U.S. Army Soldiers, 2005 – 2014

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2005 through 2014. [b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center. [c] Unstable rates (n < 20) are not reported. [d] DoDSERs from 2005–2006 with missing event type were resolved as suicide attempt cases if they could not be confirmed as suicide cases.

Table E-3. Age-Specific Rates[a–c] of Suicide Attempt,[d] per 100,000, U.S. Army Soldiers, 2005 – 2014

Age	17 – 24 yrs old		25 – 34 yrs old		35 – 64 yrs old	
	Rate	95% CI	Rate	95% CI	Rate	95% CI
YEAR OF ATTEMPT						
2005	183.3	166.1 – 200.6	70.1	59.4 – 80.8	23.9	17.0 – 30.8
2006	265.3	244.2 – 286.5	91.3	78.8 – 103.8	29.2	22.4 – 38.3
2007	272.1	250.7 – 293.6	89.7	77.5 – 101.9	27.2	19.8 – 34.7
2008	151.2	135.6 – 166.9	56.8	47.4 – 66.2	24.8	17.8 – 31.8
2009	114.2	100.7 – 127.7	55.7	46.8 – 64.7	19.2	13.2 – 25.3
2010	86.1	74.1 – 98.0	53.0	45.1 – 62.4	20.7	14.0 – 26.4
2011	100.7	87.4 – 113.9	54.6	50.2 – 68.3	29.1	22.5 – 37.7
2012	86.5	73.8 – 99.3	50.2	42.8 – 59.9	20.8	15.3– 28.5
2013	120.7	105.4 – 136.0	68.4	58.2 – 78.6	33.7	23.4– 39.7
2014	135.9	119.3 – 152.5	72.5	61.9 – 83.0	30.5	23.1 – 37.9

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2005 through 2014. [b] US Army population counts used to calculate rates were provided by the Defense Manpower Data Center. [c] Unstable rates (n < 20) are not reported. [d] DoDSERs from 2005–2006 with missing event type were resolved as suicide attempt cases if they could not be confirmed as suicide cases.

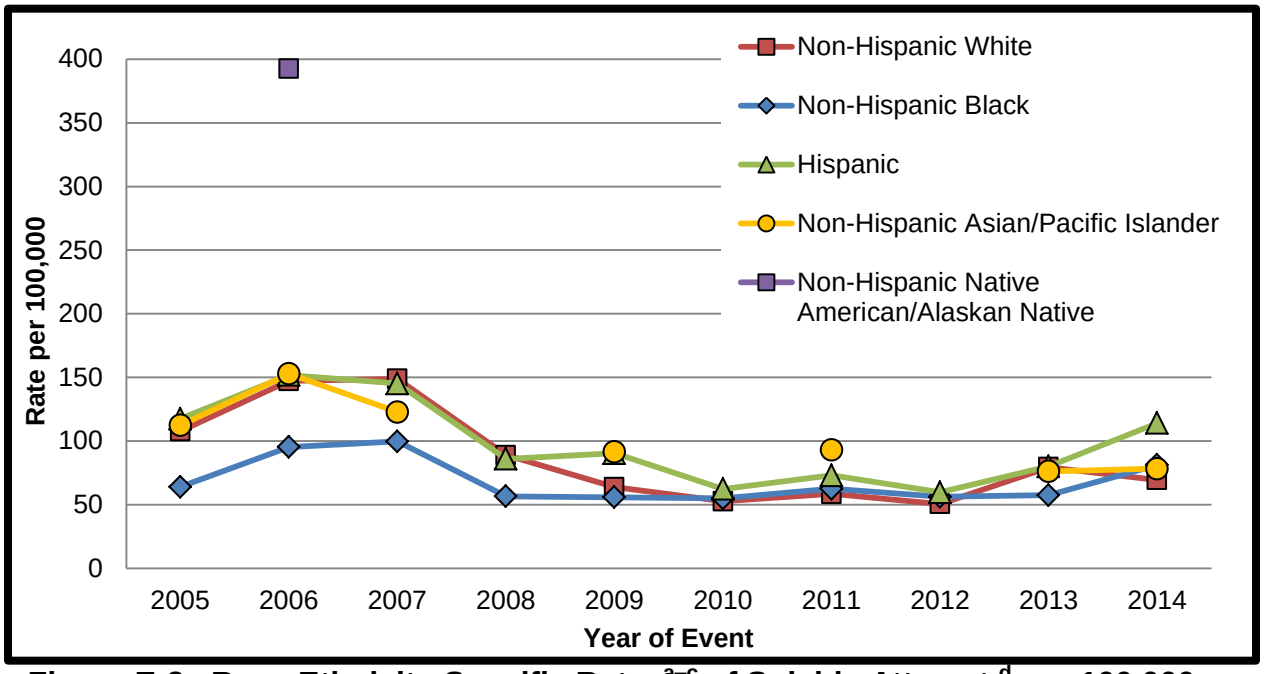

Figure E-3. Race-Ethnicity-Specific Rates[a–c] of Suicide Attempt,[d] per 100,000, U.S. Army Soldiers, 2005 – 2014

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2005 through 2014. [b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center. [c] Unstable rates (n < 20) are not reported. Specifically, there were fewer than 20 suicide attempts by non-Hispanic Asian or Pacific Islander Soldiers in some years and by Native American or Alaska Native Soldiers in all but one year, so rates could not be calculated for those groups in those years. [d] DoDSERs from 2005–2006 with missing event type were resolved as suicide attempt cases if they could not be confirmed as suicide cases.

Table E-4. Race-Ethnicity-Specific Rates[a–c] of Suicide Attempt,[d] per 100,000, U.S. Army Soldiers, 2005 – 2014

	Non-Hispanic White		Non-Hispanic Black		Hispanic		Non-Hispanic Native American Indian/ Alaskan Native		Non-Hispanic Asian/ Pacific Islander	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
YEAR OF ATTEMPT										
2005	107.8	97.8 – 117.8	64.1	50.7 – 77.5	117.6	91.5 – 143.7	--	--	112.4	66.4 – 158.3
2006	147.2	135.3 – 159.0	95.3	78.4 – 112.2	151.9	122.2 – 181.7	392.5	224.6 – 560.4	152.9	99.1 – 206.8
2007	148.9	137.1 – 160.8	99.8	82.4 – 117.3	145.3	116.7 – 173.9	--	--	122.9	74.7 – 171.0
2008	89.0	80.1 – 97.8	56.7	43.7 – 69.6	86.0	64.4 – 107.5	--	--	--	--
2009	63.8	56.4 – 71.1	55.9	43.3 – 68.5	90.5	69.0 – 112.0	--	--	91.6	53.3 – 129.9
2010	52.8	46.1 – 59.5	55.0	42.5 – 67.4	62.4	44.7 – 80.0	--	--	--	--
2011	58.5	51.4 – 65.6	62.6	49.2 – 76.0	73.1	54.0 – 92.3	--	--	93.1	55.8 – 130.3
2012	50.6	43.8 – 57.4	56.3	43.4 – 69.2	59.8	42.3 – 77.2	--	--	--	--
2013	79.5	70.6 – 88.3	57.5	44.5 – 70.6	80.1	59.9 – 100.4	--	--	76.2	44.3 – 108.0
2014	69.5	61.3 – 77.7	81.3	66.1 – 96.6	114.2	90.6 – 137.8	--	--	78.4	47.0 – 109.8

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2005 through 2014. [b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center. [c] Unstable rates (n < 20) are not reported. Specifically, there were fewer than 20 suicide attempts by non-Hispanic Asian or Pacific Islander Soldiers in some years and by Native American or Alaska Native Soldiers in all but one year, so rates could not be calculated for those groups in those years. [d] DoDSERs from 2005–2006 with missing event type were resolved as suicide attempt cases if they could not be confirmed as suicide cases.

Table E-5. Military Characteristics, Suicide Attempt Cases,[a] U.S. Army, 2012 – 2014

Characteristic	Suicide Attempt Cases n (%) 2012 (n = 352)	2013 (n = 474)	2014 (n = 504)	Army Distribution[b] (%) 2014	Test for Significant Difference[c] (p-value) 2014 vs 2012	2014 vs 2013
COMPONENT					0.084	0.052
Regular Army	309 (88)	437 (92)	461 (91)	78		
Activated National Guard	30 (9)	30 (6)	24 (5)	12		
Activated Army Reserve	13 (4)	7 (1)	19 (4)	10		
RANK					**0.042**	0.736
E1–E4	250 (71)	314 (66)	325 (64)	36		
E5–E9	91 (26)	136 (29)	145 (29)	43		
W1–W5	4 (1)	6 (1)	7 (1)	3		
Cadets	0 (0)	0 (0)	0 (0)	—		
O1–O3	4 (1)	13 (3)	22 (4)	9		
O4–O7	3 (<1)	4 (<1)	5 (<1)	8		
Missing	0 (0)	1 (<1)	0 (0)			
NUMBER OF DEPLOYMENTS[d]					**0.005**	**<0.001**
0	150 (43)	192 (41)	251 (50)	NA		
1	111 (32)	133 (28)	115 (23)	NA		
2	57 (16)	97 (20)	63 (13)	NA		
3	25 (7)	34 (7)	51 (10)	NA		
4+	9 (3)	18 (4)	24 (5)	NA		

Legend: DoDSER – Department of Defense Suicide Event Report, E – Enlisted, NA – Not Available, O – Officer, OEF – Operation Enduring Freedom, OIF – Operation Iraqi Freedom, OND – Operation New Dawn, W – Warrant Officer.

Notes: [a]Suicide attempt cases are from DoDSERs, which are available only for cases serious enough to warrant hospitalization or evacuation. [b]Data for proportions were provided by the Defense Manpower Data Center. [c]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [d]Refers to lifetime history of OEF, OIF, or OND deployment.

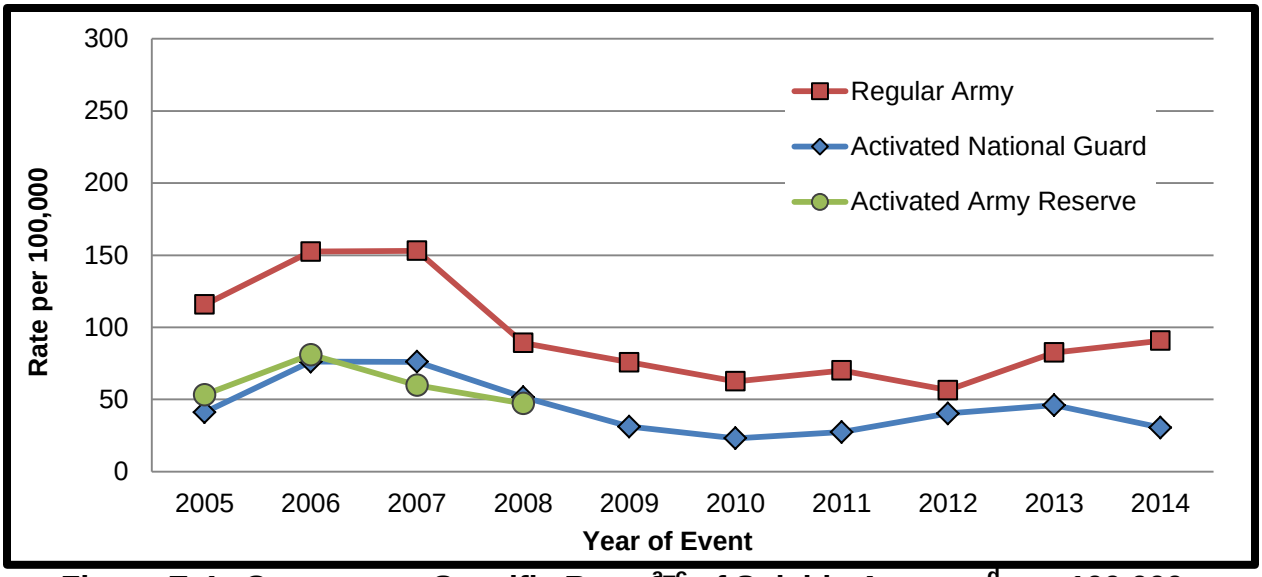

Figure E-4. Component-Specific Rates[a–c] of Suicide Attempt,[d] per 100,000, U.S. Army Soldiers, 2005 – 2014

Notes [a] Rates only include cases with identifiable demographic factors and population counts from 2005 through 2014. [b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center. [c] Unstable rates (n < 20) are not reported. Specifically, in some years, there were fewer than 20 suicide attempts by Army Reserve Soldiers, so rates could not be calculated for those years. [d] DoDSERs from 2005–2006 with missing event type were resolved as suicide attempt cases if they could not be confirmed as suicide cases.

Table E-6. Component-Specific Rates[a–c] of Suicide Attempt,[d] per 100,000, U.S. Army Soldiers, 2005 – 2014

Component	Regular Army		Activated National Guard		Activated Army Reserve	
	Rate	95% CI	Rate	95% CI	Rate	95% CI
YEAR OF ATTEMPT						
2005	115.8	106.3 – 125.4	41.2	29.1 – 53.2	53.4	35.9 – 70.8
2006	152.5	141.7 – 163.4	76.2	57.5 – 94.8	81.1	57.9 – 104.3
2007	153.1	142.4 – 163.9	76.1	57.0 – 95.2	59.9	39.5 – 80.4
2008	89.2	81.2 – 97.3	51.6	36.5 – 66.7	47.3	30.1 – 64.6
2009	75.8	68.5 – 83.1	31.2	20.2 – 42.2	--	--
2010	62.5	56.0 – 69.1	23.1	13.2 – 32.9	--	--
2011	70.1	63.2 – 77.0	27.4	16.2 – 38.6	--	--
2012	56.4	50.1 – 62.7	40.3	25.9 – 54.7	--	--
2013	82.5	74.8 – 90.2	46.0	29.5 – 62.4	--	--
2014	90.7	82.4 – 98.9	30.5	18.3 – 42.7	--	--

Notes [a] Rates only include cases with identifiable demographic factors and population counts from 2005 through 2014. [b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center. [c] Unstable rates (n < 20) are not reported. Specifically, in some years, there were fewer than 20 suicide attempts by Army Reserve Soldiers, so rates could not be calculated for that group in those years. [d] DoDSERs from 2005–2006 with missing event type were resolved as suicide attempt cases if they could not be confirmed as suicide cases.

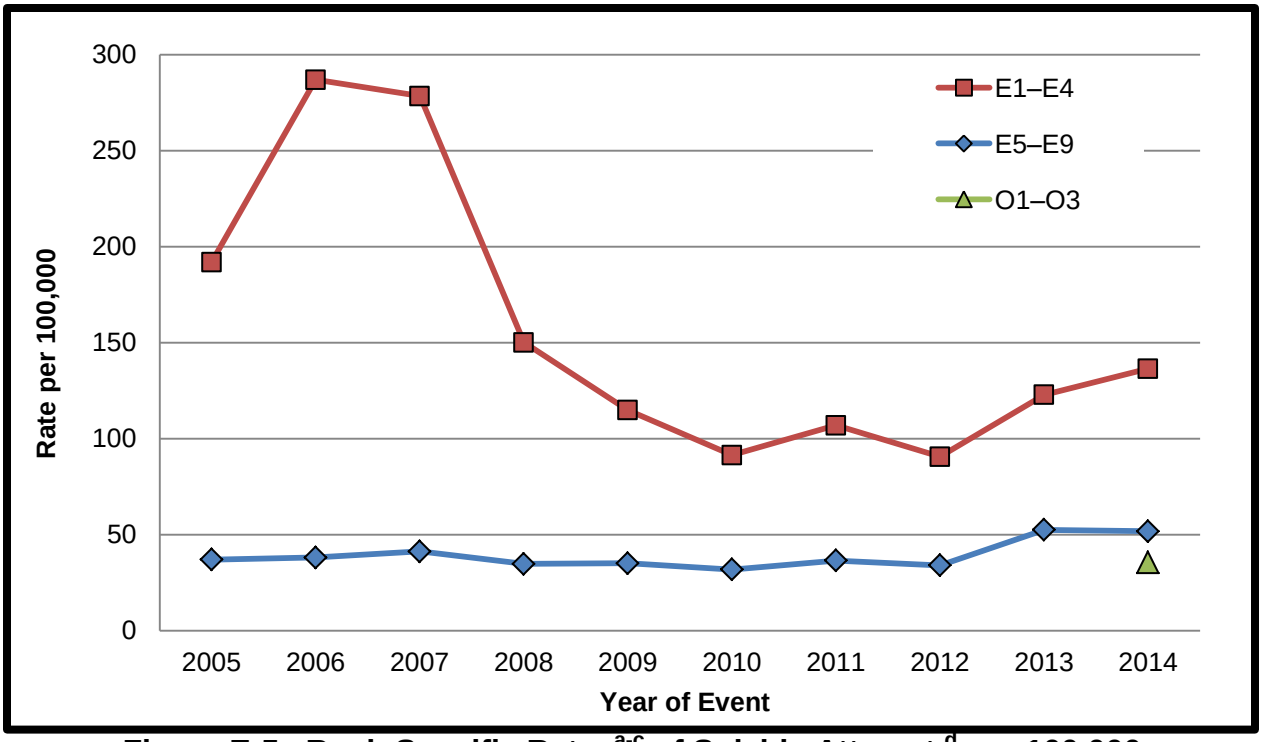

Figure E-5. Rank-Specific Rates[a-c] of Suicide Attempt,[d] per 100,000, U.S. Army Soldiers, 2005 – 2014

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2005 through 2014. [b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center. [c] Unstable rates (n < 20) are not reported. Specifically, there were fewer than 20 suicide attempts by Officers or Warrant Officers in most years, so rates could not be calculated for those years. [d] DoDSERs from 2005–2006 with missing event type were resolved as suicide attempt cases if they could not be confirmed as suicide cases.

Table E-7. Rank-Specific Rates[a–c] of Suicide Attempt,[d] per 100,000, U.S. Army Soldiers, 2005 – 2014

	E1 – E4		E5 – E9		O1 – O3		O4 – O10		W1 – W5	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
YEAR OF ATTEMPT										
2005	192.0	175.6 – 208.5	37.1	29.9 – 44.2	--	--	--	--	--	--
2006	287.0	266.4 – 307.6	38.2	30.9 – 45.6	--	--	--	--	--	--
2007	278.5	258.5 – 298.6	41.3	33.6 – 49.0	--	--	--	--	--	--
2008	150.2	136.1 – 164.4	34.8	27.9 – 41.7	--	--	--	--	--	--
2009	114.9	102.8 – 126.9	35.2	28.4 – 42.1	--	--	--	--	--	--
2010	91.5	80.7 – 102.2	31.9	25.4 – 38.5	--	--	--	--	--	--
2011	107.0	95.3 – 118.8	36.6	29.5 – 43.8	--	--	--	--	--	--
2012	90.7	79.5 – 101.9	34.1	27.1 – 41.1	--	--	--	--	--	--
2013	122.9	109.3 – 136.5	52.6	43.8 – 61.5	--	--	--	--	--	--
2014	136.5	121.6 – 151.3	51.8	43.4 – 60.2	35.6	20.7 – 50.5	--	--	--	--

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2005 through 2014. [b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center. [c] Unstable rates (n < 20) are not reported. Specifically, there were fewer than 20 suicide attempts by Officers or Warrant Officers in most years, so rates could not be calculated for those years. [d] DoDSERs from 2005–2006 with missing event type were resolved as suicide attempt cases if they could not be confirmed as suicide cases.

Table E-8. Location and Method,[a] Suicide Attempt Cases,[b] U.S. Army, 2012 – 2014

Characteristic	Suicide Attempt Cases n (%) 2012 (n = 352)	2013 (n = 474)	2014 (n = 504)	Test for Significant Difference[c] (p-value) 2014 vs 2012	2014 vs 2013
LOCATION OF SUICIDE ATTEMPT				**<0.001**	**<0.001**
USA	309 (88)	427 (90)	408 (81)		
In Theater	4 (1)	13 (3)	20 (4)		
Other[d]	15 (4)	33 (7)	73 (14)		
Missing	3 (<1)	1 (<1)	3 (<1)		
Unknown	21 (6)	0 (0)	0 (0)		
METHOD OF SUICIDE ATTEMPT				**<0.001**	0.436
Gunshot Wound	21 (6)	50 (11)	48 (10)		
Hanging/Asphyxiation	45 (13)	41 (9)	64 (13)		
Drug/Alcohol Overdose	166 (47)	248 (52)	254 (50)		
Cutting	35 (10)	56 (12)	59 (12)		
Other[e]	55 (16)	76 (16)	74 (15)		
Unknown	30 (9)	3 (<1)	5 (<1)		

Notes: [a]Location and method of suicide attempt from DoDSER. [b]Suicide attempt cases are from DoDSERs, which are available only for cases serious enough to warrant hospitalization or evacuation. [c]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, p<0.05. [d]Primarily Europe or Korea. [e]Includes carbon monoxide and other poisoning, jumping from heights or in front of vehicles, vehicle crashes, or drowning.

Table E-9. Additional Event Characteristics, Suicide Attempt Cases,[a] U.S. Army, 2012 – 2014

Event Characteristic – n (%)	Suicide Attempt Cases n (%)			Test for Significant Difference[b] (p-value)	
	2012 (n = 352)	2013 (n = 474)	2014 (n = 504)	2014 vs 2012	2014 vs 2013
SUBSTANCE INVOLVEMENT					
Event Involved Alcohol	105 (30)	144 (30)	147 (29)	—[c]	0.501
Event Involved Drugs	171 (49)	243 (51)	251 (50)	—[c]	0.377
OTHER EVENT CHARACTERISTICS					
Communicated Prior to Event	75 (21)	120 (25)	123 (24)	—[c]	0.357

Notes: [a] Suicide attempt cases are from DoDSERs, which are available only for cases serious enough to warrant hospitalization or evacuation. [b]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [c]Comparison omitted because >10% of 2012 data unknown or missing.

Table E-10. Legal History and Stressors[a] from DoDSERs, Suicide Attempt Cases,[b] U.S. Army, 2012 – 2014

Legal History and Stressors year before attempt, except as noted	Suicide Attempt Cases n (%) 2012 (n = 352)	2013 (n =474)	2014 (n = 504)	Test for Significant Difference[c] (p-value) 2014 vs 2012	2014 vs 2013
LEGAL HISTORY					
Article 15	57 (16)	76 (16)	77 (15)	—[d]	0.541
Civil Legal Problems	30 (9)	35 (7)	42 (8)	—[d]	0.742
Administrative Separation[e]	34 (10)	43 (9)	59 (12)	—[d]	0.260
AWOL	18 (5)	16 (3)	14 (3)	—[d]	0.545
Nonselection[f]	12 (3)	23 (5)	23 (5)	—[d]	0.644
Courts Martial	15 (4)	13 (3)	11 (2)	—[d]	0.517
Any of the above	104 (30)	145 (31)	156 (31)	—[d]	0.623
MEDICAL BOARD[g]					
Yes	48 (14)	73 (15)	54 (11)	—[d]	**0.019**
STRESSORS[h]					
Relationship Problem	155 (44)	228 (48)	255 (51)	—[d]	0.708
Work Stress	124 (35)	185 (39)	221 (44)	—[d]	0.607
Physical Health Problem	69 (20)	99 (21)	82 (16)	—[d]	**0.032**
Victim of Abuse					
Previous Year	38 (11)	55 (12)	67 (13)	—[d]	0.641
Ever	176 (50)	290 (61)	315 (63)		
Emotional Abuse	72 (20)	119 (25)	125 (25)	—[d]	0.591
Physical Abuse	57 (16)	96 (20)	104 (21)	—[d]	0.839
Sexual Abuse	47 (13)	75 (16)	86 (17)	—[d]	0.867
Spouse/Family/Friend Death	55 (16)	93 (20)	104 (21)	—[d]	0.988
Perpetrator of Abuse	24 (7)	27 (6)	31 (6)	—[d]	0.914
Financial Stress	40 (11)	49 (10)	45 (9)	—[d]	0.262
Spouse/Family Health Problem	21 (6)	34 (7)	31 (6)	—[d]	0.342
Spousal/Family/Friend Suicide					
Previous year	9 (3)	27 (6)	37 (7)	—[d]	0.400
Ever	51 (14)	87 (18)	110 (22)	—[d]	0.500
Any of the above	257 (73)	369 (78)	412 (82)	—[d]	0.717

Table E-10. Legal History and Stressors[a] from DoDSERs, Suicide Attempt Cases,[b] U.S. Army, 2012 – 2014 (continued)

Legal History and Stressors year before attempt, except as noted	Suicide Attempt Cases n (%) 2012 (n = 352)	2013 (n =474)	2014 (n = 504)	Test for Significant Difference[c] (p-value) 2014 vs 2012	2014 vs 2013
PROGRAM UTILIZATION					
Substance Abuse Services	64 (18)	96 (20)	87 (17)	——[d]	0.188
Family Advocacy Program	30 (9)	23 (5)	27 (5)	——[d]	0.775
Ever Received Suicide Prevention Training	137 (39)	291 (61)	352 (70)	——[d]	——[d]

Legend: AWOL – absent without leave, DoDSER – Department of Defense Suicide Event Report.

Notes: [a]Legal history and stressors within year before suicide attempt, except as noted. [b]Suicide attempt cases are from DoDSERs, which are available only for cases serious enough to warrant hospitalization or evacuation. [c]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [d]Comparison omitted because >10% unknown or missing. [e]Considered for separation from the Army on the basis of conduct or inability to meet standards of duty performance and discipline. [f]Not selected for advanced schooling, promotion, or command. [g]Medical evaluation board to determine fitness for continued duty. [h]More than one stressor may apply.

Table E-11. Behavioral Health Indicators from PDHAs and PDHRAs,[a] Suicide Attempt Cases, U.S. Army, 2012 – 2014

Indicator	Suicide Attempt Cases with PDHAs or PDHRAs n (%)			Test for Significant Difference[b] (p-value)	
	2012	2013	2014	2014 vs 2012	2014 vs 2013
POST-DEPLOYMENT HEALTH ASSESSMENTS	(n = 52)	(n = 57)	(n = 46)		
Depression Symptoms[c]	25 (48)	29 (51)	26 (57)	0.404	0.633
Posttraumatic Stress Symptoms[d]	19 (37)	27 (47)	23 (50)	0.179	0.928
Suicidal Thoughts	2 (4)	2 (4)	4 (9)	0.418	0.403
Referred for BH Care	13 (25)	17 (30)	18 (39)	0.855	0.969
POST-DEPLOYMENT HEALTH REASSESSMENTS	(n = 53)	(n = 67)	(n = 41)		
Depression Symptoms[c]	29 (55)	49 (73)	21 (51)	0.662	**0.021**
Posttraumatic Stress Symptoms[d]	21 (40)	34 (51)	20 (49)	0.418	0.783
Suicidal Thoughts	1 (2)	3 (4)	3 (7)	0.317	0.672
Referred for BH Care	7 (13)	15 (22)	12 (29)	0.191	0.634

Legend: BH – behavioral health, PDHA – Post-Deployment Health Assessment, PDHRA – Post-Deployment Health Reassessment.

Notes: [a]Data from the most recent PDHA and PDHRA in the 12 months before the suicide attempt. [b]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [c]Patient Health Questionnaire-2 (PHQ-2). [d]PTSD Checklist – Civilian (PCL-C).

Table E-12. Alcohol Misuse Indicators,[a,b] Suicide Attempt Cases,[c] U.S. Army, 2012 – 2014

Indicator	Suicide Attempt Cases with PHAs n (%)			Test for Significant Difference[d] (p-value)	
	2012 (n = 236)	2013 (n = 354)	2014 (n = 379)	2014 vs 2012	2014 vs 2013
ALCOHOL MISUSE					
Unhealthy Drinking[b]	24 (10)	33 (9)	29 (8)	0.233	0.192
Probable Alcohol Disorder[e]	8 (3)	6 (2)	4 (1)	0.065	0.523
Referred to ASAP	10 (4)	18 (5)	11 (3)	0.375	0.130
Received Alcohol-Related Education	87 (37)	122 (34)	131 (35)	0.562	0.977

Legend: ASAP – Army Substance Abuse Program, AUDIT-C – Alcohol Use Disorders Identification Test, DoDSER – Department of Defense Suicide Event Report, PHA – Periodic Health Assessment.

Notes: [a]Based on AUDIT-C scores from the most recent PHA in the 15 months before the suicide attempt. [b]The threshold for a positive screen indicating unhealthy drinking was raised one point to 5 or more for men and 4 or more for women. Therefore, results may differ from previous publications. [c]Suicide attempt cases are from DoDSERs, which are available only for cases serious enough to warrant hospitalization or evacuation. [d]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [e]A high positive screen, indicating probable alcohol disorder, is 8 and above.

Table E-13. Behavioral Health Indicators, Suicide Attempt Cases,[a] U.S. Army, 2012 – 2014

Indicator	Suicide Attempt Cases n (%) 2012 (n = 340)[c]	2013 (n = 467)[d]	2014 (n = 493)[e]	Test for Significant Difference[b] (p-value) 2014 vs 2012	2014 vs 2013
MEDICAL ENCOUNTERS[f]					
Inpatient Encounter Involving BH	120 (35)	175 (37)	156 (32)	0.271	0.058
Outpatient Encounter Involving BH	291 (86)	411 (88)	413 (84)	0.477	0.060
Encounter Involving BH in 30 Days Before Event	217 (64)	307 (66)	301 (61)	0.418	0.132
BH DIAGNOSIS[f]					
Any BH Diagnosis[g]					
Prevalence[h] Before Event	274 (81)	365 (78)	375 (76)	0.122	0.441
Incidence in Year Before Event	202 (59)	272 (58)	279 (57)	0.418	0.605
More Than One BH Diagnosis[i]					
Prevalence[h] Before Event	201 (59)	282 (60)	274 (56)	0.311	0.132
Incidence in Year Before Event	104 (31)	159 (34)	155 (31)	0.252	0.374
Any Mood Disorder					
Prevalence[h] Before Event	179 (53)	241 (52)	237 (48)	0.194	0.274
Incidence in Year Before Event	94 (28)	136 (29)	133 (27)	0.981	0.460
Major Depression					
Prevalence[h] Before Event	90 (26)	120 (26)	130 (26)	0.974	0.812
Incidence in Year Before Event	54 (16)	73 (16)	78 (16)	0.383	0.936
Other Depressive Disorders					
Prevalence[h] Before Event	149 (44)	212 (45)	193 (39)	0.178	0.050
Incidence in Year Before Event	77 (23)	122 (26)	106 (22)	0.695	0.093
Bipolar Disorder					
Prevalence[h] Before Event	14 (4)	27 (6)	15 (3)	0.405	**0.038**
Incidence in Year Before Event	7 (2)	20 (4)	10 (2)	0.976	**0.045**
PTSD					
Prevalence[h] Before Event	63 (19)	107 (23)	116 (24)	0.084	0.821
Incidence in Year Before Event	37 (11)	64 (14)	70 (14)	0.160	0.823

Table E-13. Behavioral Health Indicators, Suicide Attempt Cases,[a] U.S. Army, 2012 – 2014 (continued)

Indicator	Suicide Attempt Cases n (%) 2012 (n = 340)[c]	2013 (n = 467)[d]	2014 (n = 493)[e]	Test for Significant Difference[b] (p-value) 2014 vs 2012	2014 vs 2013
BH DIAGNOSIS[f] (continued)					
Other Anxiety Disorder[j]					
Prevalence[h] Before Event	119 (35)	177 (38)	171 (35)	0.925	0.300
Incidence in Year Before Event	59 (17)	97 (21)	100 (20)	0.290	0.852
Adjustment Disorder					
Prevalence[h] Before Event	224 (66)	286 (61)	289 (59)	**0.034**	0.408
Incidence in Year Before Event	113 (33)	141 (30)	151 (31)	0.427	0.883
Substance Use Disorder[k]					
Prevalence[h] Before Event	111 (33)	152 (33)	132 (27)	0.067	0.050
Incidence in Year Before Event	54 (16)	80 (17)	66 (13)	0.314	0.107
Personality Disorder[l]					
Prevalence[h] Before Event	33 (10)	35 (7)	36 (7)	0.216	0.909[j]
Incidence in Year Before Event	17 (5)	14 (3)	28 (6)	0.670	**0.042**
Psychosis					
Prevalence[h] Before Event	13 (4)	19 (4)	10 (2)	0.120	0.065
Incidence in Year Before Event	11 (3)	12 (3)	5 (1)	**0.022**	0.068
Previous Suicide Attempt/Self Harm[m]					
Prevalence[h] Before Event	48 (14)	66 (14)	48 (10)	0.052	**0.035**
Incidence in Year Before Event	37 (11)	46 (10)	37 (8)	0.092	0.196
Previous Suicidal Ideation[n]					
Prevalence[h] Before Event	84 (25)	126 (27)	124 (25)	0.884	0.519
Incidence in Year Before Event	70 (21)	99 (21)	105 (21)	0.805	0.970

Legend: BH – behavioral health, DoDSER – Department of Defense Suicide Event Report, ICD-9 – International Classification of Diseases, 9th revision, Clinical Modification, PTSD – posttraumatic stress disorder.

Notes: [a]Suicide attempt cases are from DoDSERs, which are available only for cases serious enough to warrant hospitalization or evacuation. [b]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [c]Medical claims data were available for all but 12 cases. [d]Medical claims data were available for all but 7 cases. [e]Medical claims data were available for all but 11 cases. [f]May have more than one. [g]Any BH diagnosis includes one or more of the following: mood, PTSD, other anxiety disorders, adjustment disorder, substance use disorders, personality disorders, psychosis. [h]Ever diagnosed during time in service. [i]More than one BH diagnosis includes more than one of the aforementioned diagnoses. [j]Includes, for example, panic disorder, generalized anxiety disorder, or obsessive-compulsive disorder. [k]Includes drug or alcohol use disorders. [l]Includes, for example, borderline or antisocial personality disorders. [m]Based on ICD-9 E-codes for self-inflicted injuries. [n]Based on ICD-9 V-code for suicidal ideation.

Table E-14. Traumatic Brain Injuries,[a] Suicide Attempt Cases,[b] U.S. Army, 2012 – 2014

Indicator	Suicide Attempt Cases n (%)			Test for Significant Difference[c] (p-value)	
	2012 (n = 340)[d]	2013 (n = 467)[e]	2014 (n = 493)[f]	2014 vs 2012	2014 vs 2013
MEDICAL ENCOUNTERS[g]					
Inpatient Encounter Involving TBI	13 (4)	12 (3)	11 (2)	0.177	0.732
Outpatient Encounter Involving TBI	66 (19)	81 (17)	71 (14)	0.055	0.212
Encounter Involving TBI in Year Before Event	41 (12)	40 (9)	38 (8)	**0.035**	0.627
Encounter Involving TBI in 30 Days Before Event	10 (3)	13 (3)	12 (2)	0.654	0.734
TBI DIAGNOSES[g]					
Any TBI Diagnosis	65 (19)	75 (16)	68 (14)	**0.039**	0.324
First TBI Diagnosis in Year Before Event	23 (7)	26 (6)	26 (5)	0.369	0.841

Legend: DoDSER – Department of Defense Suicide Event Report, ICD-9 – International Classification of Diseases, 9th revision, Clinical Modification, TBI – traumatic brain injury.

Notes: [a]Based on ICD-9 codes for traumatic brain injuries provided by the Defense and Veterans Brain Injury Center (DVBIC): 800–801.99, 803–804.99, 850–854.19. [b]Suicide attempt cases are from DoDSERs, which are available only for cases serious enough to warrant hospitalization or evacuation. [b]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [d]Medical claims data were available for all but 12 cases. [e]Medical claims data were available for all but 7 cases. [f]Medical claims data were available for all but 11 cases. [g]May have more than one.

Table E-15. Pain,[a] Suicide Attempt Cases,[b] U.S. Army, 2012 – 2014

Indicator	Suicide Attempt Cases n (%) 2012 (n = 340)[d]	2013 (n = 467)[e]	2014 (n = 493)[f]	Test for Significant Difference[c] (p-value) 2014 vs 2012	2014 vs 2013
ENCOUNTERS					
Encounter for Pain in Year Before Event	187 (55)	262 (56)	252 (51)	0.270	0.122
Encounter for Pain in 30 days Before Event	73 (21)	115 (25)	77 (16)	**0.031**	**<0.001**
DIAGNOSES					
Pain Diagnosis in Year Before Event	173 (51)	246 (53)	228 (46)	0.188	**0.046**

Legend: DoDSER – Department of Defense Suicide Event Report, ICD-9 – International Classification of Diseases, 9th revision, Clinical Modification.

Notes: [a] ICD-9 codes indicating pain include 307.8–307.89, 337.2–337.29, 338–338.4 (omitting 338.2 and 338.28), 724–725.40, 786.5–786.52, 388.72, 729.5, 723.1, 780.96, and 784.0. [b] Suicide attempt cases are from DoDSERs, which are available only for cases serious enough to warrant hospitalization or evacuation. [c] Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [d] Medical claims data were available for all but 12 cases. [e] Medical claims data were available for all but 7 cases. [f] Medical claims data were available for all but 11 cases.

Table E-16. Sleep Problems,[a] Suicide Attempt Cases,[b] U.S. Army, 2012 – 2014

Indicator	Suicide Attempt Cases n (%) 2012 (n = 340)[d]	2013 (n = 467)[e]	2014 (n = 493)[f]	Test for Significant Difference[c] (p-value) 2014 vs 2012	2014 vs 2013
ENCOUNTERS					
Encounter for Sleep Problem in Year Before Event	122 (36)	167 (36)	171 (35)	0.722	0.728
Encounter for Sleep Problem in 30 days Before Event	41 (12)	65 (14)	57 (12)	0.827	0.273
DIAGNOSES					
Sleep Problem Diagnosis in Year Before Event	99 (29)	140 (30)	138 (28)	0.723	0.498

Legend: DoDSER – Department of Defense Suicide Event Report, ICD-9 – International Classification of Diseases, 9th revision, Clinical Modification.

Notes: [a] ICD-9 codes indicating sleep problems include 307.4–307.48, 327–327.8, 780.5–780.56, 291.82, 292.85, 780.58, and V694. [b]Suicide attempt cases are from DoDSERs, which are available only for cases serious enough to warrant hospitalization or evacuation. [c]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [d]Medical claims data were available for all but 12 cases. [e]Medical claims data were available for all but 7 cases. [f]Medical claims data were available for all but 11 cases.

Table E-17. Polypharmacy, Suicide Attempt Cases,[a] U.S. Army, 2012 – 2014

Category	Suicide Attempt Cases n (%) 2012 (n = 352)	2013 (n = 474)	2014 (n = 504)	Test for Significant Difference[b] (p-value) 2014 vs 2012	2014 vs 2013
POLYPHARMACY					
Any Polypharmacy[c]	58 (16)	86 (18)	68 (13)	0.225	**0.046**
Categories of Polypharmacy[d]					
1. Met all criteria[e]	7 (12)	8 (9)	3 (4)		
2. Psychotropics & opioid[f]	11 (19)	17 (20)	14 (21)		
3. Psychotropics & ER visits[g]	1 (2)	5 (6)	2 (3)		
4. Opioid & ER visits[h]	2 (3)	0 (0)	3 (4)		
5. At least one opioid prescription[i]	12 (21)	24 (28)	17 (25)		
6. Multiple psychotropic prescriptions[j]	19 (33)	26 (30)	25 (37)		
7. 3+ ER visits with opioids prescribed[k]	6 (10)	6 (7)	4 (6)		

Legend: OTSG – Office of the Surgeon General; ER – Emergency Room.

Notes: [a]Suicide attempt cases are from DoDSERs, which are available only for cases serious enough to warrant hospitalization or evacuation. [b]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [c]Met at least one criterion for polypharmacy, as defined by OTSG Policy 13-032 definition, at the time of the event. [d]Proportion out of cases with any polypharmacy. [e]Met all three polypharmacy criteria (categories 5, 6, and 7 in the table above). [f]Had 4 or more prescriptions for psychotropic drugs in the 30 days prior to the event and had 4 or more prescriptions in the 30 days prior to the event, at least one of which was an opioid. [g]Had 4 or more prescriptions for psychotropic drugs in the 30 days prior to the event and had at least 3 ER visits in the year preceding the event where an opioid was prescribed. [h]Had at least 3 ER visits in the year preceding the event where an opioid was prescribed and had 4 or more prescriptions in the 30 days prior to the event, at least one of which was an opioid. [i]Had 4 or more prescriptions in the 30 days prior to the event, at least one of which was an opioid. [j]Had 4 or more prescriptions for psychotropic drugs in the 30 days prior to the event. [k]Had at least 3 ER visits in the year preceding the event where an opioid was prescribed.

Table E-18. Drug Testing History,[a] Suicide Attempt Cases,[b] U.S. Army, 2012 – 2014

Measure	Suicide Attempt Cases n (%) 2012 (n = 322)	2013 (n = 435)	2014 (n = 467)	Test for Significant Difference[c] (p-value) 2014 vs 2012	2014 vs 2013
DRUG TEST HISTORY					
Positive Drug Test	21 (7)	45 (10)	34 (7)	0.681	0.104
More Than One Positive Drug Test[d]	4 (19)	10 (22)	12 (35)	0.198	0.199
Positive Drug Test in Year Before Event[d]	14 (67)	29 (64)	28 (82)	0.208	0.079
Amphetamines[d]	2 (10)	4 (9)	5 (15)	0.696	0.488
Cannabis[d]	8 (38)	19 (42)	15 (44)	0.660	0.866
Cocaine[d]	9 (43)	10 (22)	6 (18)	**0.041**	0.616
Oxycodone/Oxymorphone[d]	0 (0)	9 (20)	7 (21)	**0.036**	0.949
Opiates[d]	1 (5)	7 (16)	2 (6)	1.000	0.286
Heroin[d]	0 (0)	0 (0)	0 (0)	—	—
Steroids[d]	0 (0)	0 (0)	0 (0)	—	—
Barbiturates[d]	0 (0)	0 (0)	0 (0)	—	—

Legend: DoDSER – Department of Defense Suicide Event Report.

Notes: [a]Drug testing history is available only for cases who have a record of a drug test in the Drug and Alcohol Management Information System (DAMIS). [b]Suicide attempt cases are from DoDSERs, which are available only for cases serious enough to warrant hospitalization or evacuation. [c]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [d]Proportion out of cases with positive drug tests.

Table E-19. ASAP Intake History,[a,b] Suicide Attempt Cases,[c] U.S. Army, 2012 – 2014

Measure	Suicide Attempt Cases n (%)			Test for Significant Difference[d] (p-value)	
	2012 (n = 352)	2013 (n = 474)	2014 (n = 504)	2014 vs 2012	2014 vs 2013
ASAP INTAKE SCREENING					
Screened for Intake	66 (19)	92 (19)	83 (16)	0.386	0.230
Enrolled for Treatment[e]	53 (80)	77 (84)	68 (82)	0.801	0.757

Legend: ASAP – Army Substance Abuse Program, DoDSER – Department of Defense Suicide Event Report.

Notes: [a]Data from the Drug and Alcohol Management Information System (DAMIS). [b]ASAP screening and enrollment in the year before the event. [c]Suicide attempt cases are from DoDSERs, which area available only for cases serious enough to warrant hospitalization or evacuation. [d]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [e]Proportion out of cases screened for intake.

Appendix F

Suicidal Ideation Cases Tables and Figures

Tables

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Table F-1. Demographic Characteristics, Suicidal Ideation Cases,[a] U.S. Army, 2012 – 2014

Characteristic	Suicidal Ideation Cases n (%) 2012 (n = 772)	2013 (n = 901)	2014 (n = 1040)	Army Distribution[b] (%) 2014	Test for Significant Difference[c] (p-value) 2014 vs 2012	2014 vs 2013
SEX					0.351	0.160
Male	616 (80)	726 (81)	811 (78)	85		
Female	156 (20)	175 (19)	229 (22)	15		
AGE (YR)					0.163	0.682
17–24	424 (55)	470 (52)	525 (50)	29		
25–34	237 (31)	299 (33)	350 (34)	38		
35–64	110 (14)	132 (15)	165 (16)	33		
Missing	1 (<1)	0 (0)	0 (0)			
Mean	26 (±7.4)	26 (±7.3)	27 (±7.4)	NA	**0.048**[d]	0.184[d]
Mode	19	20	19	NA		
RACE-ETHNICITY					**0.020**	0.258
Non-Hispanic White	499 (65)	552 (61)	603 (58)	61		
Non-Hispanic Black	131 (17)	156 (17)	215 (21)	21		
Hispanic	87 (11)	129 (14)	157 (15)	12		
Non-Hispanic Asian/ Pacific Islander	42 (5)	48 (5)	53 (5)	5		
Non-Hispanic American Indian/Alaska Native	6 (<1)	15 (2)	11 (1)	1		
Missing	7 (<1)	1 (<1)	1 (<1)			
MARITAL STATUS					**0.007**	0.306
Single	405 (52)	441 (49)	472 (45)	NA		
Married	324 (42)	413 (46)	499 (48)	NA		
Divorced	32 (4)	44 (5)	64 (6)	NA		
Other[e]	5 (<1)	2 (<1)	4 (<1)	NA		
Unknown	6 (<1)	1 (<1)	1 (<1)			

Legend: DoDSER – Department of Defense Suicide Event Report, NA – Not Available.

Notes: [a]Suicidal ideation cases are from DoDSERs, which are available only for cases serious enough to warrant hospitalization or evacuation. [b]Data for proportions were provided by the Defense Manpower Data Center. [c]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, p<0.05. [d]T test of means. [e]Includes widowed and legally separated.

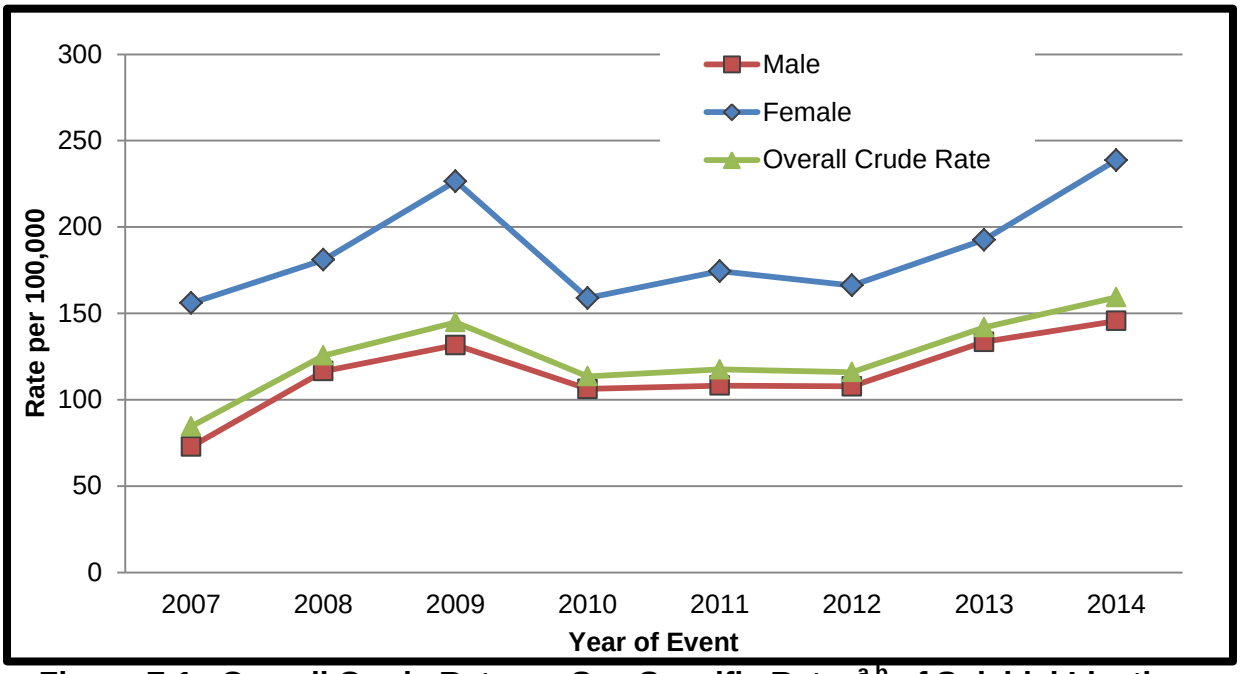

Figure F-1. Overall Crude Rate vs. Sex-Specific Rates[a,b] of Suicidal Ideation, per 100,000, U.S. Army Soldiers, 2007 – 2014

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2007 through 2014. [b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center.

Table F-2. Overall Crude Rate vs. Sex-Specific Rates[a,b] of Suicidal Ideation, per 100,000, U.S. Army Soldiers, 2007 – 2014

	Overall		Sex			
			Male		Female	
	Rate	95% CI	Rate	95% CI	Rate	95% CI
YEAR OF EVENT						
2007	84.6	77.5 – 91.7	72.9	65.8 – 80.0	156.0	130.3 – 181.7
2008	125.6	117.1 – 134.0	116.5	107.7 – 125.2	181.0	154.0 – 208.0
2009	144.9	136.1 – 153.8	131.6	122.5 – 140.7	226.5	197.0 – 255.9
2010	113.6	105.7 – 121.4	106.2	98.0 – 114.4	158.9	134.2 – 183.7
2011	117.5	109.5 – 125.6	108.2	99.9 – 116.6	174.4	148.2 – 200.5
2012	116.0	107.8 – 124.2	107.7	99.2 – 116.2	166.2	140.2 – 192.3
2013	141.9	132.7 – 151.2	133.5	123.8 – 143.2	192.6	164.1 – 221.1
2014	159.3	149.6 – 168.9	145.6	135.5 – 155.6	238.7	207.8 – 269.6

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2007 through 2014. [b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center.

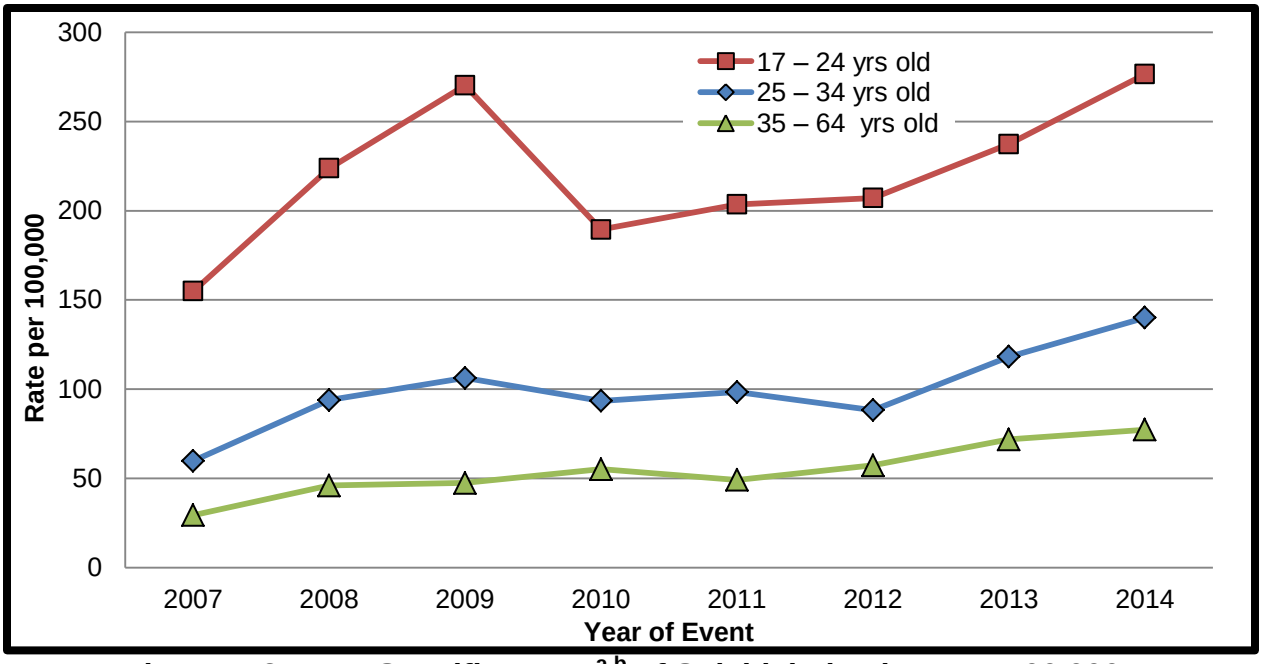

Figure F-2. Age-Specific Rates[a,b] of Suicidal Ideation, per 100,000, U.S. Army Soldiers, 2007 – 2014

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2007 through 2014. [b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center.

Table F-3. Age-Specific Rates[a,b] of Suicidal Ideation, per 100,000, U.S. Army Soldiers, 2007 – 2014

Age	17 – 24 yrs old		25 – 34 yrs old		35 – 64 yrs old	
	Rate	95% CI	Rate	95% CI	Rate	95% CI
YEAR OF EVENT						
2007	155.0	138.8 – 171.2	59.8	49.8 – 69.8	29.4	21.6 – 37.1
2008	223.9	204.8 – 243.0	93.9	81.8 – 105.9	46.0	36.5 – 55.6
2009	270.3	249.5 – 291.1	106.3	94.0 – 118.6	47.4	37.9 – 56.8
2010	189.5	171.7 – 207.3	93.4	82.0 – 104.8	55.1	44.9 – 65.3
2011	203.6	184.8 – 222.5	98.4	86.8 – 110.1	49.1	39.4 – 58.8
2012	207.2	187.5 – 227.0	88.2	76.9 – 99.4	57.3	46.6 – 68.0
2013	237.4	215.9 – 258.8	118.2	104.8 – 131.6	71.8	59.5 – 84.0
2014	276.6	252.9 – 300.2	140.1	125.4 – 154.8	77.3	65.5 – 89.1

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2007 through 2014. [b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center.

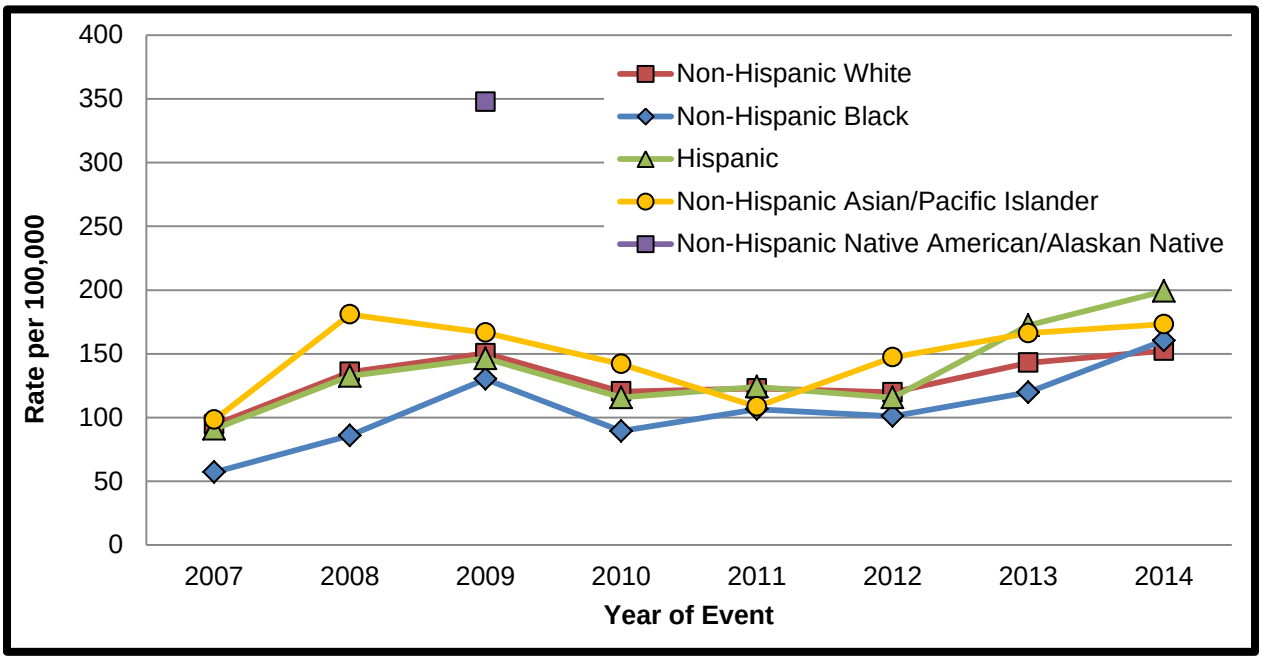

Figure F-3. Race-Ethnicity–Specific Rates[a–c] of Suicidal Ideation, per 100,000, U.S. Army Soldiers, 2007 – 2014

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2007 through 2014.
[b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center.
[c] Unstable rates (n < 20) are not reported. Specifically, in most years there were fewer than 20 cases of suicidal ideation by non-Hispanic Native American/Alaska Native Soldiers, so rates could not be calculated for that group.

Table F-4. Race-Ethnicity-Specific Rates[a–c] of Suicidal Ideation, per 100,000, U.S. Army Soldiers, 2007 – 2014

Race-ethnicity	Non-Hispanic White		Non-Hispanic Black		Hispanic		Non-Hispanic Native American/ Alaskan Native[c]		Non-Hispanic Asian/ Pacific Islander	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
YEAR OF EVENT										
2007	94.3	84.8 – 103.7	57.1	43.9 – 70.2	91.0	68.4 – 113.7	--	--	98.3	55.2 – 141.4
2008	135.7	124.8 – 146.7	85.8	69.9 – 101.6	132.5	105.7 – 159.2	--	--	180.9	124.8 – 236.9
2009	150.3	139.1 – 161.5	130.2	111.0 – 149.4	146.3	119.0 – 173.7	347.6	195.3 – 499.9	166.6	114.9 – 218.2
2010	120.4	110.3 – 130.5	89.4	73.6 – 105.3	115.7	91.6 – 139.7	--	--	141.9	94.9 – 188.9
2011	122.8	112.5 – 133.2	106.5	89.1 – 124.0	124.1	99.1 – 149.0	--	--	108.6	68.4 – 148.8
2012	119.7	109.2 – 130.2	101.0	83.7 – 118.2	115.6	91.3 – 139.9	--	--	147.2	102.7 – 191.7
2013	142.9	131.0 – 154.8	119.7	100.9 – 138.5	172.3	142.6 – 202.0	--	--	166.2	119.2 – 213.2
2014	152.4	140.2 – 164.6	160.4	139.0 – 181.8	199.2	168.0 – 230.3	--	--	173.2	126.6 – 219.8

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2007 through 2014. [b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center. [c] Unstable rates (n < 20) are not reported. Specifically, in nearly all years there were fewer than 20 cases of suicidal ideation by non-Hispanic Native American/Alaska Native Soldiers, so rates could not be calculated for that group.

Table F-5. Military Characteristics, Suicidal Ideation Cases,[a] U.S. Army, 2012 – 2014

Characteristic	Suicidal Ideation Cases n (%)			Army Distribution[b] (%)	Test for Significant Difference[c] (p-value)	
	2012 (n = 772)	2013 (n = 901)	2014 (n = 1040)	2014	2014 vs 2012	2014 vs 2013
COMPONENT					**0.016**	0.881
Regular Army	660 (85)	804 (89)	935 (90)	78		
Activated National Guard	68 (9)	60 (7)	66 (6)	12		
Activated Army Reserve	44 (6)	37 (4)	39 (4)	10		
RANK					**0.001**	0.317
E1–E4	561 (73)	619 (69)	682 (66)	36		
E5–E9	163 (21)	236 (26)	297 (29)	43		
W1–W5	4 (<1)	9 (1)	6 (<1)	3		
Cadets	7 (<1)	0 (0)	0 (0)	—		
O1–O3	15 (2)	23 (3)	38 (4)	9		
O4–O7	14 (2)	11 (1)	14 (1)	8		
Missing	8 (1)	3 (<1)	3 (<1)			
NUMBER OF DEPLOYMENTS[d]					**0.044**	0.591
0	381 (49)	467 (52)	504 (48)	NA		
1	197 (26)	209 (23)	260 (25)	NA		
2	118 (15)	113 (13)	133 (13)	NA		
3	55 (7)	74 (8)	89 (9)	NA		
4+	21 (3)	38 (4)	54 (5)	NA		

Legend: DoDSER – Department of Defense Suicide Event Report, E – Enlisted, NA – Not Available, O – Officer, OEF – Operation Enduring Freedom, OIF – Operation Iraqi Freedom, OND – Operation New Dawn, W – Warrant Officer.

Notes: [a]Suicidal ideation cases are from DoDSERs, which are available only for cases serious enough to warrant hospitalization or evacuation. [b]Proportions were provided by the Defense Manpower Data Center. [c]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, p<0.05. [e]Refers to lifetime history of OEF, OIF, or OND deployment.

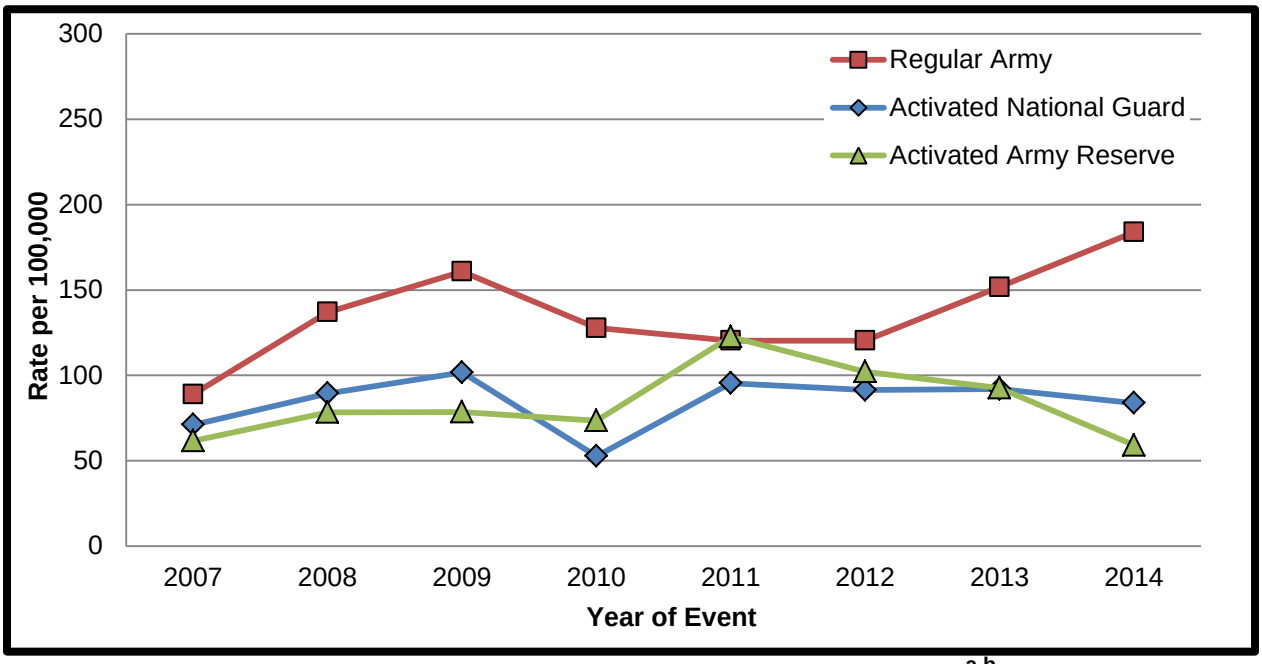

Figure F-4. Component-Specific Rates of Suicidal Ideation,[a,b] per 100,000, U.S. Army Soldiers, 2007 – 2014

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2007 through 2014. [b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center.

Table F-6. Component-Specific Rates of Suicidal Ideation,[a,b] per 100,000, U.S. Army Soldiers, 2007 – 2014

Component	Regular Army		Activated National Guard		Activated Army Reserve	
	Rate	95% CI	Rate	95% CI	Rate	95% CI
YEAR OF EVENT						
2007	89.0	80.8 – 97.2	71.1	52.7 – 89.6	61.7	41.0 – 82.5
2008	137.0	127.0 – 146.9	89.4	69.6 – 109.3	78.4	56.2 – 100.5
2009	160.8	150.2 – 171.4	101.7	81.9 – 121.6	78.6	57.2 – 100.0
2010	127.8	118.4 – 137.1	52.7	37.8 – 67.6	73.5	51.8 – 95.2
2011	120.4	111.3 – 129.4	95.4	74.5 – 116.2	122.6	92.3 – 152.9
2012	120.4	111.2 – 129.6	91.4	69.6 – 113.1	102.2	72.0 – 132.4
2013	151.8	141.3 – 162.3	92.0	68.7 – 115.2	92.6	62.7 – 122.4
2014	183.9	172.1 – 195.7	83.8	63.6 – 104.0	59.2	40.6 – 77.8

Notes: [a] Rates only include cases with identifiable demographic factors and population counts from 2007 through 2014.
[b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center.

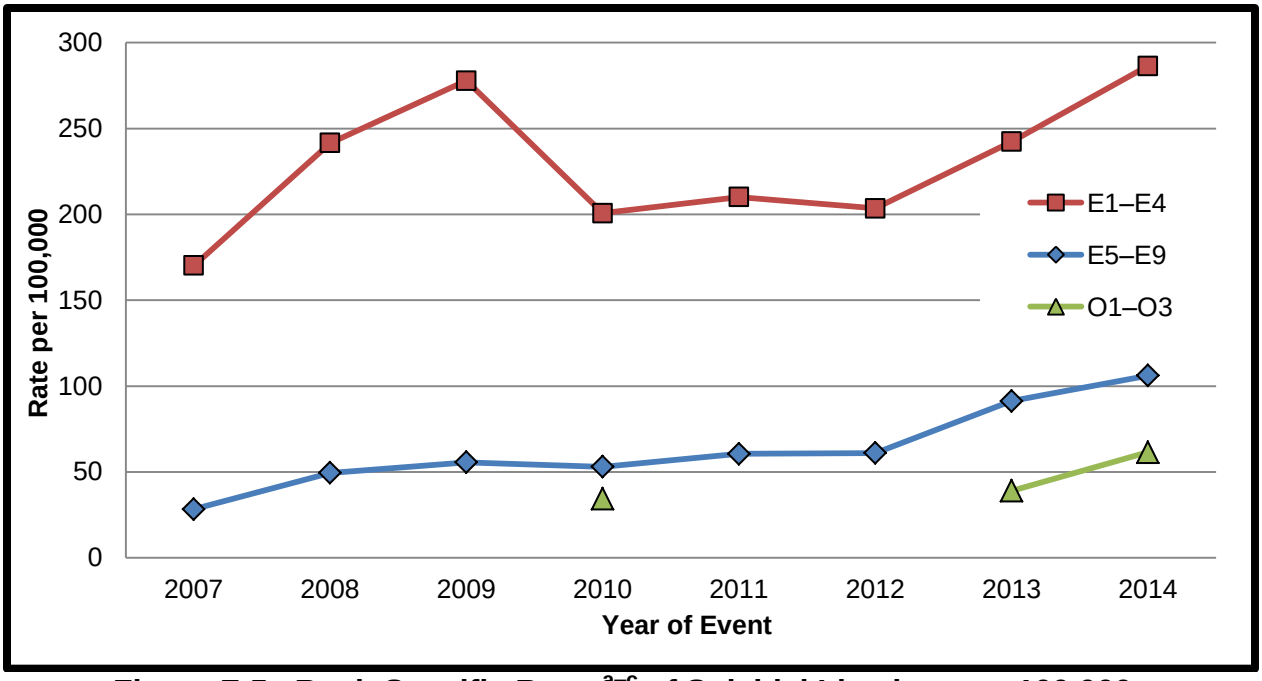

Figure F-5. Rank-Specific Rates[a–c] of Suicidal Ideation, per 100,000, U.S. Army Soldiers, 2007 – 2014

Notes [a] Rates only include cases with identifiable military factors and population counts from 2007 through 2014.
[b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center.
[c] Unstable rates (n < 20) are not reported. Specifically, in nearly all years there were fewer than 20 cases of suicidal ideation by Officers or Warrant Officers, so rates could not be calculated for those groups for those years.

Table F-7. Rank-Specific Rates,[a–c] of Suicidal Ideation, per 100,000, U.S. Army Soldiers, 2007 – 2014

Rank	E1 – E4		E5 – E9		O1 – O3		O4 – O10		W1 – W5	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
YEAR OF EVENT										
2007	170.2	154.5 – 185.9	28.3	21.9 – 34.6	--	--	--	--	--	--
2008	241.6	223.6 – 259.5	49.5	41.3 – 57.8	--	--	--	--	--	--
2009	277.8	259.1 – 296.6	55.6	47.0 – 64.2	--	--	--	--	--	--
2010	200.7	184.8 – 216.6	53.0	44.5 – 61.4	34.4	19.3 – 49.5	--	--	--	--
2011	210.1	193.6 – 226.5	60.6	51.4 – 69.8	--	--	--	--	--	--
2012	203.5	186.7 – 220.4	61.0	51.6 – 70.4	--	--	--	--	--	--
2013	242.3	223.2 – 261.4	91.3	79.7 –103.0	39.0	23.0 – 54.9	--	--	--	--
2014	286.4	264.9 – 307.8	106.1	94.0 –118.2	61.5	42.0 – 81.1				

Notes [a] Rates only include cases with identifiable military factors and population counts from 2007 through 2014. [b] U.S. Army population counts used to calculate rates were provided by the Defense Manpower Data Center. [c] Unstable rates (n < 20) are not reported. Specifically, in nearly all years, there were fewer than 20 cases of suicidal ideation by Officers or Warrant Officers, so rates could not be calculated for those groups for those years.

Table F-8 Location,[a] Suicidal Ideation Cases, U.S. Army, 2012 – 2014

Characteristic	Suicidal Ideation Cases n (%) 2012 (n = 772)	2013 (n = 901)	2014 (n = 1040)	Test for Significant Difference[c] (p-value) 2014 vs 2012	2014 vs 2013
LOCATION OF SUICIDAL IDEATION				**<0.001**	**<0.001**
USA	684 (89)	792 (88)	847 (81)		
In Theater	7 (<1)	14 (2)	13 (1)		
Other[d]	36 (5)	83 (9)	160 (15)		
Missing	0 (0)	12 (1)	20 (2)		
Unknown	45 (6)	0 (0)	0 (0)		

Legend: DoDSER – Department of Defense Suicide Event Report.

Notes: [a]Location of suicidal ideation is from DoDSERs, which are available only for cases serious enough to warrant hospitalization or evacuation. [c]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [d]Primarily Europe or Korea.

Table F-9. Legal History and Stressors[a] from DoDSERs, Suicidal Ideation Cases, U.S. Army, 2012 – 2014

Legal History and Stressors year before event, except as noted	Suicidal Ideation Cases n (%)			Test for Significant Difference[b] (p-value)	
	2012 (n = 772)	2013 (n = 901)	2014 (n = 1040)	2014 vs 2012	2014 vs 2013
LEGAL HISTORY					
Article 15	116 (15)	145 (16)	140 (13)	——[c]	0.053
Civil Legal Problems	44 (6)	64 (7)	57 (5)	——[c]	0.097
Administrative Separation[d]	67 (9)	100 (11)	114 (11)	——[c]	0.720
AWOL	30 (4)	34 (4)	35 (3)	——[c]	0.551
Nonselection[e]	19 (2)	41 (5)	43 (4)	——[c]	0.442
Courts Martial	16 (2)	21 (2)	21 (2)	——[c]	0.576
Any of the above	193 (25)	264 (29)	276 (27)	——[c]	**0.044**
MEDICAL BOARD[f]					
Yes	75 (10)	97 (11)	131 (13)	——[c]	0.299
STRESSORS[g]					
Relationship Problem	239 (31)	334 (37)	377 (36)	——[c]	0.424
Work Stress	219 (28)	328 (36)	442 (43)	——[c]	**0.047**
Physical Health Problem	97 (13)	181 (20)	251 (24)	——[c]	0.062
Victim of Abuse				——[c]	
Previous year	65 (8)	71 (8)	104 (10)	——[c]	0.162
Ever	319 (41)	441 (49)	558 (54)		
Emotional Abuse	125 (16)	164 (18)	222 (21)	——[c]	0.158
Physical Abuse	109 (14)	152 (17)	185 (18)	——[c]	0.802
Sexual Abuse	85 (11)	125 (14)	151 (15)	——[c]	0.927
Spouse/Family/Friend Death	87 (11)	133 (15)	185 (18)	——[c]	0.172
Perpetrator of Abuse	27 (3)	37 (4)	48 (5)	——[c]	0.692
Financial Stress	70 (9)	91 (10)	99 (10)	——[c]	0.416
Spouse/Family Health Problem	37 (5)	69 (8)	99 (10)	——[c]	0.224
Spousal/Family/Friend Suicide					
Previous year	23 (3)	36 (4)	47 (5)	——[c]	0.625
Ever	65 (8)	143 (16)	183 (18)	——[c]	0.666[i]
Any of the above	457 (59)	629 (70)	756 (73)	——[c]	0.491

Table F-9. Legal History and Stressors[a] from DoDSERs, Suicidal Ideation Cases, U.S. Army, 2012 – 2014 (continued)

Legal History and Stressors year before event, except as noted	Suicidal Ideation Cases n (%) 2012 (n = 772)	2013 (n = 901)	2014 (n = 1040)	Test for Significant Difference[b] (p-value) 2014 vs 2012	2014 vs 2013
PROGRAM UTILIZATION					
Substance Abuse Services	90 (12)	114 (13)	139 (13)	——[c]	0.773
Family Advocacy Program	27 (3)	43 (5)	57 (5)	——[c]	0.557
Ever Received Suicide Prevention Training	234 (30)	432 (48)	640 (62)	——[c]	——[c]

Legend: AWOL – absent without leave, DoDSER – Department of Defense Suicide Event Report.

Notes: [a]Legal history and stressors within year before suicidal ideation, except as noted. [b]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [c]Comparison omitted because >10% unknown or missing. [d]Considered for separation from the Army on the basis of conduct or inability to meet standards of duty performance and discipline. [e]Not selected for advanced schooling, promotion, or command. [f]Medical evaluation board to determine fitness for continued duty. [g]More than one stressor may apply.

Table F-10. Behavioral Health Indicators from PDHAs and PDHRAs,[a] Suicidal Ideation Cases, U.S. Army, 2012 – 2014

	Suicidal Ideation Cases with PDHAs or PDHRAs n (%)			Test for Significant Difference[b] (p-value)	
Indicator	2012	2013	2014	2014 vs 2012	2014 vs 2013
POST-DEPLOYMENT HEALTH ASSESSMENTS	(n = 115)	(n = 71)	(n = 99)		
Depression Symptoms[c]	58 (50)	42 (59)	49 (49)	0.848	0.200
Posttraumatic Stress Symptoms[d]	44 (38)	34 (48)	30 (30)	0.206	**0.018**
Suicidal Thoughts	3 (3)	1 (1)	4 (4)	0.712	0.402
Referred for BH Care	34 (30)	23 (32)	20 (20)	**0.002**	**0.010**
POST-DEPLOYMENT HEALTH REASSESSMENTS	(n = 131)	(n = 76)	(n = 124)		
Depression Symptoms[c]	79 (60)	48 (63)	84 (68)	0.242	0.534
Posttraumatic Stress Symptoms[d]	57 (44)	38 (50)	62 (50)	0.296	0.972
Suicidal Thoughts	11 (8)	4 (5)	6 (5)	0.248	1.000[f]
Referred for BH Care	25 (19)	15 (20)	21 (17)	0.196	0.384

Legend: BH – behavioral health, PDHA – Post-Deployment Health Assessment, PDHRA – Post-Deployment Health Reassessment.

Notes: [a]Data from the most recent PDHA and PDHRA in the 12 months before the suicidal ideation. [b]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [c]Patient Health Questionnaire-2 (PHQ-2). [d]PTSD Checklist – Civilian (PCL-C).

Table F-11. Alcohol Misuse Indicators,[a,b] Suicidal Ideation Cases, U.S. Army, 2012 – 2014

Indicator	Suicidal Ideation Cases with PHAs n (%)			Test for Significant Difference[c] (p-value)	
	2012 (n = 425)	2013 (n = 573)	2014 (n = 768)	2014 vs 2012	2014 vs 2013
ALCOHOL MISUSE					
Unhealthy Drinking[b]	34 (8)	49 (9)	58 (8)	0.322	0.458
Probable Alcohol Disorder[d]	8 (2)	12 (2)	7 (<1)	0.096	0.065
Referred to ASAP	17 (4)	32 (6)	28 (4)	0.759	0.089
Received Alcohol-Related Education	143 (34)	228 (40)	300 (39)	0.064	0.787

Legend: ASAP – Army Substance Abuse Program, AUDIT-C – Alcohol Use Disorders Identification Test, DoDSER – Department of Defense Suicide Event Report, PHA – Periodic Health Assessment.

Notes: [a]Based on AUDIT-C scores from the most recent PHA in the 15 months before the suicidal ideation. [b]The threshold for a positive screen indicating unhealthy drinking was raised one point to 5 or more for men and 4 or more for women. Therefore, results may differ from previous publications. [c]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [d]A high positive screen, indicating probable alcohol disorder, is 8 and above.

Table F-12. Behavioral Health Indicators, Suicidal Ideation Cases,[a] U.S. Army, 2012 – 2014

Indicator	Suicidal Ideation Cases n (%)			Test for Significant Difference[b] (p-value)	
	2012 (n = 740)[c]	2013 (n = 883)[d]	2014 (n = 1023)[e]	2014 vs 2012	2014 vs 2013
MEDICAL ENCOUNTERS[f]					
Inpatient Encounter Involving BH	182 (25)	209 (24)	277 (27)	0.241	0.089
Outpatient Encounter Involving BH	591 (80)	726 (82)	868 (85)	**0.006**	0.122
Encounter Involving BH in 30 Days Before Event	440 (59)	552 (63)	670 (65)	**0.010**	0.176
BH DIAGNOSIS[f]					
Any BH Diagnosis[g]					
Prevalence[h] Before Event	542 (73)	661 (75)	792 (77)	**0.044**	0.190
Incidence in Year Before Event	397 (54)	481 (54)	561 (55)	0.621	0.873
More Than One BH Diagnosis[i]					
Prevalence[h] Before Event	385 (52)	465 (53)	579 (57)	0.057	0.085
Incidence in Year Before Event	204 (28)	224 (25)	278 (27)	0.855	0.372
Any Mood Disorder					
Prevalence[h] Before Event	338 (46)	425 (48)	524 (51)	**0.022**	0.178
Incidence in Year Before Event	186 (25)	237 (27)	285 (28)	0.202	0.619
Major Depression					
Prevalence[h] Before Event	180 (24)	211 (24)	272 (27)	0.283	0.178
Incidence in Year Before Event	106 (14)	136 (15)	162 (16)	0.383	0.795
Other Depressive Disorders					
Prevalence[h] Before Event	295 (40)	368 (42)	452 (44)	0.070	0.270
Incidence in Year Before Event	161 (22)	202 (23)	242 (24)	0.349	0.688
Bipolar Disorder					
Prevalence[h] Before Event	37 (5)	35 (4)	40 (4)	0.269	0.952
Incidence in Year Before Event	22 (3)	21 (2)	26 (3)	0.583	0.819
PTSD					
Prevalence[h] Before Event	136 (18)	166 (19)	218 (21)	0.129	0.173
Incidence in Year Before Event	66 (9)	84 (10)	110 (11)	0.205	0.372

Table F-12. Behavioral Health Indicators, Suicidal Ideation Cases,[a] U.S. Army, 2012 – 2014 (continued)

Indicator	Suicidal Ideation Cases n (%) 2012 (n = 740)[c]	2013 (n = 883)[d]	2014 (n = 1023)[e]	Test for Significant Difference[b] (p-value) 2014 vs 2012	2014 vs 2013
BH DIAGNOSIS[f] (continued)					
Other Anxiety Disorder[j]					
Prevalence[h] Before Event	222 (30)	268 (30)	371 (36)	**0.006**	**0.006**
Incidence in Year Before Event	113 (15)	126 (14)	186 (18)	0.108	**0.021**
Adjustment Disorder					
Prevalence[h] Before Event	430 (58)	519 (59)	624 (61)	0.222	0.324
Incidence in Year Before Event	217 (29)	271 (31)	279 (27)	0.344	0.101
Substance Use Disorder[k]					
Prevalence[h] Before Event	166 (22)	183 (21)	217 (21)	0.540	0.795
Incidence in Year Before Event	84 (11)	87 (10)	105 (10)	0.466	0.766
Personality Disorder[l]					
Prevalence[h] Before Event	55 (7)	53 (6)	62 (6)	0.253	0.958
Incidence in Year Before Event	31 (4)	25 (3)	44 (4)	0.909	0.087
Psychosis					
Prevalence[h] Before Event	28 (4)	28 (3)	32 (3)	0.454	0.957
Incidence in Year Before Event	20 (3)	18 (2)	26 (3)	0.834	0.466
Previous Suicidal Ideation/ Self Harm[m]					
Prevalence[h] Before Event	42 (6)	22 (2)	41 (4)	0.103	0.065
Incidence in Year Before Event	25 (3)	12 (1)	22 (2)	0.114	0.193
Previous Suicidal Ideation[n]					
Prevalence[h] Before Event	159 (21)	164 (19)	232 (23)	0.552	**0.028**
Incidence in Year Before Event	128 (17)	136 (15)	185 (18)	0.670	0.119

Legend: BH – behavioral health, DoDSER – Department of Defense Suicide Event Report, ICD-9 – International Classification of Disease, 9th revision, Clinical Modification, PTSD – posttraumatic stress disorder.

Notes: [a]Suicidal Ideation cases are from DoDSERs, which are available only for cases serious enough to warrant hospitalization or evacuation. [b]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [c]Medical claims data were available for all but 12 cases. [d]Medical claims data were available for all but 7 cases. [e]Medical claims data were available for all but 11 cases. [f]May have more than one. [g]Any BH diagnosis includes one or more of the following: mood, PTSD, other anxiety disorders, adjustment disorder, substance use disorders, personality disorders, psychosis. [h]Ever diagnosed during time in service. [i]More than one BH diagnosis includes more than one of the aforementioned diagnoses. [j]Includes, for example, panic disorder, generalized anxiety disorder, or obsessive-compulsive disorder. [k]Includes drug or alcohol use disorders. [l]Includes, for example, borderline or antisocial personality disorders. [m]Based on ICD-9 E-codes for self-inflicted injuries. [n]Based on ICD-9 V-code for suicidal ideation.

Table F-13. Traumatic Brain Injuries,[a] Suicidal Ideation Cases,[b] U.S. Army, 2012 – 2014

Indicator	Suicidal Ideation Cases n (%) 2012 (n = 740)[d]	2013 (n = 883)[e]	2014 (n = 1023)[f]	Test for Significant Difference[c] (p-value) 2014 vs 2012	2014 vs 2013
MEDICAL ENCOUNTERS[g]					
Inpatient Encounter Involving TBI	11 (1)	19 (2)	19 (2)	0.552	0.647
Outpatient Encounter Involving TBI	95 (13)	117 (13)	157 (15)	0.137	0.193
Encounter Involving TBI in Year Before Event	57 (8)	63 (7)	76 (7)	0.830	0.805
Encounter Involving TBI in 30 Days Before Event	16 (2)	16 (2)	28 (3)	0.445	0.180
TBI DIAGNOSES[g]					
Any TBI Diagnosis	84 (11)	109 (12)	141 (14)	0.131	0.354
First TBI Diagnosis in Year Before Event	28 (4)	37 (4)	40 (4)	0.892	0.757

Legend: DoDSER – Department of Defense Suicide Event Report, ICD-9 – International Classification of Disease, 9th revision, Clinical Modification, TBI – traumatic brain injury.

Notes: [a]Based on ICD-9 codes for traumatic brain injuries provided by the Defense and Veterans Brain Injury Center (DVBIC): 800–801.99, 803–804.99, 850–854.19. [b]Suicidal ideation cases are from DoDSERs, which are available only for cases serious enough to warrant hospitalization or evacuation. [c]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [d]Medical claims data were available for all but 32 cases. [e]Medical claims data were available for all but 18 cases. [f]Medical claims data were available for all but 17 cases. [g]May have more than one.

Table F-14. Pain,[a] Suicidal Ideation Cases,[b] U.S. Army, 2012 – 2014

Indicator	Suicidal Ideation Cases n (%) 2012 (n = 740)[d]	2013 (n = 883)[e]	2014 (n = 1023)[f]	Test for Significant Difference[c] (p-value) 2014 vs 2012	2014 vs 2013
ENCOUNTERS					
Encounter for Pain in Year Before Event	362 (49)	456 (52)	582 (57)	**<0.001**	**0.022**
Encounter for Pain in 30 days Before Event	156 (21)	189 (21)	238 (23)	0.277	0.331
DIAGNOSES					
Pain Diagnosis in Year Before Event	324 (44)	425 (48)	551 (54)	**<0.001**	**0.013**

Legend: DoDSER – Department of Defense Suicide Event Report, ICD-9 – International Classification of Diseases, 9th revision, Clinical Modification.

Notes: [a]ICD-9 codes indicating pain include 307.8–307.89, 337.2–337.29, 338–338.4 (omitting 338.2 and 338.28), 724–725.40, 786.5–786.52, 388.72, 729.5, 723.1, 780.96, and 784.0. [b]Suicidal ideation cases are from DoDSERs, which are available only for cases serious enough to warrant hospitalization or evacuation. [c]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [d]Medical claims data were available for all but 32 cases. [e]Medical claims data were available for all but 18 cases. [f]Medical claims data were available for all but 17 cases.

Table F-15. Sleep Problems,[a] Suicidal Ideation Cases,[b] U.S. Army, 2012 – 2014

Indicator	Suicidal Ideation Cases n (%)			Test for Significant Difference[c] (p-value)	
	2012 (n = 740)[d]	2013 (n = 883)[e]	2014 (n = 1023)[f]	2014 vs 2012	2014 vs 2013
ENCOUNTERS					
Encounter for Sleep Problem in Year Before Event	213 (29)	270 (31)	364 (36)	**0.003**	**0.021**
Encounter for Sleep Problem in 30 Days Before Event	75 (10)	94 (11)	146 (14)	**0.010**	**0.017**
DIAGNOSES					
Sleep Problem Diagnosis in Year Before Event	163 (22)	215 (24)	291 (28)	**0.002**	**0.043**

Legend: DoDSER – Department of Defense Suicide Event Report, ICD-9 – International Classification of Diseases, 9th revision, Clinical Modification.

Notes: [a]ICD-9 codes indicating sleep problems include 307.4–307.48, 327–327.8, 780.5–780.56, 291.82, 292.85, 780.58, and V694. [b]Suicidal ideation cases are from DoDSERs, which are available only for cases serious enough to warrant hospitalization or evacuation. [c]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [d]Medical claims data were available for all but 32 cases. [e]Medical claims data were available for all but 18 cases. [f]Medical claims data were available for all but 17 cases.

Table F-16. Polypharmacy, Suicidal Ideation Cases,[a] U.S. Army, 2012 – 2014

Category	Suicidal Ideation Cases n (%) 2012 (n = 772)	2013 (n = 901)	2014 (n = 1040)	Test for Significant Difference[b] (p-value) 2014 vs 2012	2014 vs 2013
POLYPHARMACY					
Any Polypharmacy[c]	113 (15)	112 (12)	132 (13)	0.231	0.862
Categories of Polypharmacy[d]					
1. Met all criteria[e]	4 (4)	7 (6)	4 (3)		
2. Psychotropics & opioid[f]	26 (23)	22 (20)	31 (23)		
3. Psychotropics & ER visits[g]	1 (<1)	2 (2)	1 (<1)		
4. Opioid & ER visits[h]	4 (4)	3 (3)	4 (3)		
5. At least one opioid prescription[i]	31 (27)	35 (31)	30 (23)		
6. Multiple psychotropic prescriptions[j]	39 (35)	36 (32)	47 (36)		
7. 3+ ER visits with opioids prescribed[k]	8 (7)	7 (6)	15 (11)		

Legend: DoDSER – Department of Defense Suicide Event Report , OTSG – Office of the Surgeon General, ER – Emergency Room.

Notes: [a]Suicidal ideation cases are from DoDSERs, which are available only for cases serious enough to warrant hospitalization or evacuation. [b]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [c]Met at least one criterion for polypharmacy, as defined by OTSG Policy 13-032 definition, at the time of the event. [d]Proportion out of cases with any polypharmacy. [e]Met all three polypharmacy criteria (categories 5, 6, and 7 in the table above). [f]Had 4 or more prescriptions for psychotropic drugs in the 30 days prior to the event and had 4 or more prescriptions in the 30 days prior to the event, at least one of which was an opioid. [g]Had 4 or more prescriptions for psychotropic drugs in the 30 days prior to the event and had at least 3 ER visits in the year preceding the event where an opioid was prescribed. [h]Had at least 3 ER visits in the year preceding the event where an opioid was prescribed and had 4 or more prescriptions in the 30 days prior to the event, at least one of which was an opioid. [i]Had 4 or more prescriptions in the 30 days prior to the event, at least one of which was an opioid. [j]Had 4 or more prescriptions for psychotropic drugs in the 30 days prior to the event. [k]Had at least 3 ER visits in the year preceding the event where an opioid was prescribed.

Table F-17. Drug Testing History,[a] Suicidal Ideation Cases,[b] U.S. Army, 2012 – 2014

Measure	Suicidal Ideation Cases n (%)			Test for Significant Difference[c] (p-value)	
	2012 (n = 632)	2013 (n = 775)	2014 (n = 939)	2014 vs 2012	2014 vs 2013
DRUG TEST HISTORY					
Positive Drug Test	38 (6)	44 (6)	62 (7)	0.639	0.429
More than One Positive Drug Test[d]	11 (29)	16 (36)	20 (32)	0.728	0.660
Positive Drug Test in Year Before Event[d]	23 (61)	34 (77)	48 (77)	0.071	0.986
Amphetamines[d]	6 (16)	6 (14)	8 (13)	0.686	0.913
Cannabis[d]	22 (58)	24 (55)	25 (40)	0.088	0.148
Cocaine[d]	8 (21)	15 (34)	15 (24)	0.717	0.265
Oxycodone/Oxymorphone[d]	3 (8)	8 (18)	5 (8)	1.000	0.118
Opiates[d]	4 (11)	4 (9)	6 (10)	1.000	1.000
Heroin[d]	0 (0)	0 (0)	1 (2)	1.000	1.000
Steroids[d]	0 (0)	0 (0)	0 (0)	—	—
Barbiturates[d]	0 (0)	0 (0)	0 (0)	—	—

Legend: DoDSER – Department of Defense Suicide Event Report.

Notes: [a]Drug testing history is available only for cases who have a record of a drug test in the Drug and Alcohol Management Information System (DAMIS). [b]Suicidal ideation cases are from DoDSERs, which area available only for cases serious enough to warrant hospitalization or evacuation. [c]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [d]Proportion out of cases with positive drug tests.

Table F-18. ASAP Intake History,[a,b] Suicidal Ideation Cases,[c] U.S. Army, 2012 – 2014

Measure	Suicidal Ideation Cases n (%)			Test for Significant Difference[d] (p-value)	
	2012 (n = 772)	2013 (n = 901)	2014 (n = 1040)	2014 vs 2012	2014 vs 2013
ASAP INTAKE SCREENING					
Screened for Intake	87 (11)	100 (11)	134 (13)	0.299	0.228
Enrolled for Treatment[e]	72 (83)	84 (84)	110 (82)	0.899	0.701

Legend: ASAP – Army Substance Abuse Program, DoDSER – Department of Defense Suicide Event Report.

Notes: [a]Data from the Drug and Alcohol Management Information System (DAMIS). [b]ASAP screening and enrollment in the year before the event. [c]Suicidal ideation cases are from DoDSERs, which are available only for cases serious enough to warrant hospitalization or evacuation. [d]Chi-squared or Fisher's exact test p-values, as appropriate. P-values in bold indicate significant difference, $p<0.05$. [e]Proportion out of cases screened for intake.

Glossary

ABHIDE
Army Behavioral Health Integrated Data Environment

AFMES
Armed Forces Medical Examiner System

ASAP
Army Substance Abuse Program

AUDIT-C
Alcohol Use Disorders Identification Test

AWOL
Absent without leave

BH
Behavioral health

BSHOP
Behavioral and Social Health Outcomes Program

CI
Confidence Interval

DoD
Department of Defense

DoDSER
Department of Defense Suicide Event Report

E1–E9
Enlisted rank

ICD-9
International Classification of Diseases, Ninth Revision

MDR
Military Health System Data Repository

MEDCOM
United States Army Medical Command

MTF
Medical Treatment Facility

NA
Not Available

NOS
Not Otherwise Specified

O1–O10
Officer rank

OEF
Operation Enduring Freedom

OIF
Operation Iraqi Freedom

OND
Operation New Dawn

PCL-C
PTSD Checklist - Civilian

PDHA
Post-Deployment Health Assessment

PDHRA
Post-Deployment Health Reassessment

PHA
Periodic Health Assessment

PHQ-2
Patient Health Questionnaire - 2

PTS
Posttraumatic Stress

PTSD
Posttraumatic Stress Disorder

SAS v. 9.2
Statistical Analysis System version 9.2

TBI
Traumatic Brain Injury

U.S.
United States

W1–W5
Warrant Officer rank